

## **Division of Facilities Construction and Management**

# STANDARD LOW BID PROJECT – INVITATIONAL Project Budgets \$50,000 - \$100,000

June 8, 2007

# CONCRETE WALKWAY IMPROVEMENTS UTAH VALLEY STATE COLLEGE OREM, UTAH

DFCM Project Number 06131790

P & A Architects 821 Kensington Ave. Salt Lake City, Utah 84105

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Fairpark Map

Current copies of the following documents are hereby made part of these contract documents by reference. These documents are available on the DFCM web site at <a href="http://dfcm.utah.gov">http://dfcm.utah.gov</a> or are available upon request from DFCM.

DFCM General Conditions dated May 25, 2005. DFCM Application and Certification for Payment dated May 25, 2005.

Technical Specifications:

Drawings:

The Agreement and General Conditions dated May 25, 2005 have been updated from versions that were formally adopted and in use prior to this date. The changes made to the General Conditions are identified in a document entitled Revisions to General Conditions that is available on DFCM's web site at http://dfcm.utah.gov

## **INVITATION TO BID**

Only firms that have been invited to submit bids on this project are allowed to bid on this project.

Sealed bids will be received by the Division of Facilities Construction and Management (DFCM) for:

#### CONCRETE WALKWAY IMPROVEMENTS - UVSC OREM, UTAH DFCM PROJECT NO: 06131790

<u>Company</u>	<u>Contact</u>	<u>Fax</u>
Benstog Construction, Corp.	Patrick Benstog	801-399-1335
Kay General Contracting	Clark Kay	801-464-1125
Kendrick Bros. Roofing	Brad Kendrick	801-731-2020
Greene's Inc.	Sean Larsen	801-299-1948
Silver Sage	Jeremy	435-623-3359
Overman Construction, Inc.	John	801-812-1669

Bids will be in accordance with the Contract Documents that will be available on Friday, June 08, 2007, and distributed in electronic format only on CDs from DFCM, at the Wasatch Building at the Utah State Fairpark, approximately 155 North 1000 West, Salt Lake City, Utah and on the DFCM web page at <a href="http://dfcm.utah.gov">http://dfcm.utah.gov</a>. For questions regarding this project, please contact Michael A. Ambre, DFCM, at 801-209-9104. No others are to be contacted regarding this bidding process. The construction budget for this project is \$85,000.00.

A **mandatory** pre-bid meeting will be held at 9:00 on Wednesday, June 13, 2007 at UVSC – 800 W. University Parkway, Orem, Utah. All bidders wishing to bid on this project are required to attend this meeting.

Bids will be received until the hour of 1:30 PM on Wednesday, June 27, 2007 at the Wasatch Building at the Utah State Fairpark, approximately 155 North 1000 West, Salt Lake City, Utah. Refer to the map on the DFCM website for directions (<a href="http://dfcm.utah.gov/downloads/fairpark\_map.pdf">http://dfcm.utah.gov/downloads/fairpark\_map.pdf</a>). Bids will be opened and read aloud in the Wasatch Building at the Utah State Fairpark. NOTE: Bids must be received at the Wasatch Building at the Utah State Fairpark by the specified time.

A bid bond in the amount of five percent (5%) of the bid amount, made payable to the Division of Facilities Construction and Management on DFCM's bid bond form, shall accompany the bid.

The Division of Facilities Construction and Management reserves the right to reject any or all bids or to waive any formality or technicality in any bid in the interest of DFCM.

DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT Joanna Fisher, Contract Coordinator 4110 State Office Building, Salt Lake City, Utah 84114

# PROJECT DESCRIPTION

Remove approximately 4,500 square feet of asphalt pavers and 4" asphalt paving. Replace with compacted road base and 4" of concrete. In place of 4 x 4 welded wire. Fiber mesh will be used for reinforcing. One additive alternate will include five exterior post lights, please refer to drawings for further information.

DFCM FORM 1a 113006 4





Last Day to Submit

Prime Contractors

Turn In Bid and Bid

**Sub-contractor List** 

**Substantial Completion** 

Questions

Bond

Due

Date

#### **Division of Facilities Construction and Management**

#### PROJECT SCHEDULE

PROJECT NAME: Concrete Walkway Improvements – UVSC – Orem, Utah

DFCM PROJECT NO.	06131790			
Event	Day	Date	Time	Place
Bidding Documents Available	Friday	June 8, 2007	4:00 PM	DFCM Utah State Fairpark Approx 155 North 1000 West Salt Lake City, UT or DFCM web site *
Mandatory Pre-bid Site Meeting	Wednesday	June 13, 2007	9:00 AM	UVSC- West of the SA Bldg. (http://www.uvsc.edu/visitors/maps/pdf/campus2006a.pdf)

June 19, 2007

June 27, 2007

June 28, 2007

August 31, 2007

12:00 PM

1:30 PM

1:30 PM

5:00 PM

mambre@utah.gov

Wasatch Building

Utah State Fairpark

Salt Lake City, UT \*\*

4110 State Office Bldg

Fax 801-538-3677

**DFCM** 

SLC, UT

Approx 155 North 1000 West

# \* NOTE: DFCM's web site address is http://dfcm.utah.gov

Tuesday

Wednesday

Thursday

Friday

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<sup>\*\*</sup> Due to the ongoing construction on Capitol Hill and the anticipated shortage of parking during 2007, all bids will be received and opened at the Wasatch Building at the Utah State Fairpark. Refer to map on the DFCM web site for directions (http://dfcm.utah.gov/downloads/fairpark\_map.pdf)





# **Division of Facilities Construction and Management**

**DFCM** 

# **BID FORM**

NAME OF BIDDER \_\_\_\_\_ DATE \_\_\_\_

To the Division of Facilities Construction and Management 4110 State Office Building Salt Lake City, Utah 84114
The undersigned, responsive to the "Notice to Contractors" and in accordance with the "Instructions to Bidders", in compliance with your invitation for bids for the Concrete <b>Walkway Improvements</b> – <b>UVSC</b> – <b>Orem, Utah, Project No. 06131790</b> and having examined the Contract Documents and the site of the proposed Work and being familiar with all of the conditions surrounding the construction of the proposed Project, including the availability of labor, hereby proposes to furnish all labor, materials and supplies as required for the Work in accordance with the Contract Documents as specified and within the time set forth and at the price stated below. This price is to cover all expenses incurred in performing the Work required under the Contract Documents of which this bid is a part:
I/We acknowledge receipt of the following Addenda:
For all work shown on the Drawings and described in the Specifications and Contract Documents, I/we agree to perform for the sum of:
BASE BID:
DOLLARS (\$)
(In case of discrepancy, written amount shall govern)
ADDITIVE ALTERNATE No. 1: Provide and install Five exterior lights as specified in drawings.
DOLLARS (\$
(In case of discrepancy, written amount shall govern)
(In case of discrepancy, written amount shall govern)  I/We guarantee that the Work will be Substantially Complete by August 31, 2007, should I/we be the successful bidder, and agree to pay liquidated damages in the amount of \$250.00 per day for each day after expiration of
(In case of discrepancy, written amount shall govern)  I/We guarantee that the Work will be Substantially Complete by August 31, 2007, should I/we be the successful bidder, and agree to pay liquidated damages in the amount of \$250.00 per day for each day after expiration of the Contract Time as stated in Article 3 of the Contractor's Agreement.

#### BID FORM PAGE NO. 2

Upon receipt of notice of award of this bid, the undersigned agrees to execute the contract within ten (10) days, unless a shorter time is specified in the Contract Documents, and deliver acceptable Performance and Payment bonds in the prescribed form in the amount of 100% of the Contract Sum for faithful performance of the contract.

The Bid Bond attached, in the amount not less than five percent (5%) of the above bid sum, shall become the property of the Division of Facilities Construction and Management as liquidated damages for delay and additional expense caused thereby in the event that the contract is not executed and/or acceptable 100% Performance and Payment bonds are not delivered within the time set forth.

Type of Organization:		
(Corporation, Partnership, Individual, e	etc.)	
Any request and information related to	Utah Preference Laws:	
	Respectfully submitted,	
	Name of Bidder	
	ADDRESS:	
	Authorized Signature	
	Aumorized Signature	

#### INSTRUCTIONS TO BIDDERS

#### 1. <u>Drawings and Specifications, Other Contract Documents</u>

Drawings and Specifications, as well as other available Contract Documents, may be obtained as stated in the Invitation to Bid.

#### 2. Bids

Before submitting a bid, each contractor shall carefully examine the Contract Documents, shall visit the site of the Work; shall fully inform themselves as to all existing conditions and limitations; and shall include in the bid the cost of all items required by the Contract Documents. If the bidder observes that portions of the Contract Documents are at variance with applicable laws, building codes, rules, regulations or contain obvious erroneous or uncoordinated information, the bidder shall promptly notify the DFCM Representative and the necessary changes shall be accomplished by Addendum.

The bid, bearing original signatures, must be typed or handwritten in ink on the Bid Form provided in the procurement documents and submitted in a sealed envelope at the location specified by the Invitation to Bid prior to the deadline for submission of bids.

Bid bond security, in the amount of five percent (5%) of the bid, made payable to the Division of Facilities Construction and Management, shall accompany bid. THE BID BOND MUST BE ON THE BID BOND FORM PROVIDED IN THE PROCUREMENT DOCUMENTS IN ORDER TO BE CONSIDERED AN ACCEPTABLE BID.

If the bid bond security is submitted on a bid bond form other than DFCM's required bid bond form, and the bid security meets all other legal requirements, the bidder will be allowed to provide an acceptable bid bond by the close of business on the next business day following notification by DFCM of submission of a defective bid bond security. **NOTE:** A cashier's check cannot be used as a substitute for a bid bond.

#### 3. Contract and Bond

The Contractor's Agreement will be in the form found in the specifications. The Contract Time will be as indicated in the bid. The successful bidder, simultaneously with the execution of the Contract Agreement, will be required to furnish a performance bond and a payment bond, both bearing original signatures, upon the forms provided in the procurement documents. The performance and payment bonds shall be for an amount equal to one hundred percent (100%) of the contract sum and secured from a company that meets the requirements specified in the requisite forms. Any bonding requirements for subcontractors will be specified in the Supplementary General Conditions.

#### 4. Listing of Subcontractors

Listing of Subcontractors shall be as summarized in the "Instructions and Subcontractor's List Form", which are included as part of these Contract Documents. The Subcontractors List shall be delivered to DFCM or faxed to DFCM at (801)538-3677 within 24 hours of the bid opening. Requirements for listing additional subcontractors will be listed in the Contract Documents.

DFCM retains the right to audit or take other steps necessary to confirm compliance with requirements for the listing and changing of subcontractors. Any contractor who is found to not be in compliance with these requirements is subject to a debarment hearing and may be debarred from consideration for award of contracts for a period of up to three years.

#### 5. Interpretation of Drawings and Specifications

If any person or entity contemplating submitting a bid is in doubt as to the meaning of any part of the drawings, specifications or other Contract Documents, such person shall submit to the DFCM Project Manager a request for an interpretation thereof. The person or entity submitting the request will be responsible for its prompt delivery. Any interpretation of the proposed documents will be made only by addenda posted on DFCM's web site at <a href="http://dfcm.utah.gov">http://dfcm.utah.gov</a>. Neither the DFCM nor A/E will be responsible for any other explanations or interpretations of the proposed documents. A/E shall be deemed to refer to the architect or engineer hired by DFCM as the A/E or Consultant for the Project.

#### 6. Addenda

Addenda will be posted on DFCM's web site at <a href="http://dfcm.utah.gov">http://dfcm.utah.gov</a>. Contractors are responsible for obtaining information contained in each addendum from the web site. Addenda issued prior to the submittal deadline shall become part of the bidding process and must be acknowledged on the bid form. Failure to acknowledge addenda may result in disqualification from bidding.

#### 7. Award of Contract

The Contract will be awarded as soon as possible to the lowest, responsive and responsible bidder, based on the lowest combination of base bid and acceptable prioritized alternates, provided the bid is reasonable, is in the interests of the State of Utah to accept and after applying the Utah Preference Laws in U.C.A. Title 63, Chapter 56. DFCM reserves the right to waive any technicalities or formalities in any bid or in the bidding. Alternates will be accepted on a prioritized basis with Alternate 1 being highest priority, Alternate 2 having second priority, etc.

#### 8. <u>DFCM Contractor Performance Rating</u>

As a contractor completes each DFCM project, DFCM, the architect/engineer and the using agency will evaluate project performance based on the enclosed "DFCM Contractor Performance Rating" form. The ratings issued on this project will not affect this project but may affect the award on future projects.

#### 9. <u>Licensure</u>

The Contractor shall comply with and require all of its subcontractors to comply with the license laws as required by the State of Utah.

#### 10. Right to Reject Bids

DFCM reserves the right to reject any or all Bids.

#### 11. Time is of the Essence

Time is of the essence in regard to all the requirements of the Contract Documents.

#### 12. Withdrawal of Bids

Bids may be withdrawn on written request received from bidder prior to the time fixed for opening. Negligence on the part of the bidder in preparing the bid confers no right for the withdrawal of the bid after it has been opened.

#### 13. Product Approvals

Where reference is made to one or more proprietary products in the Contract Documents, but restrictive descriptive materials of one or more manufacturer(s) is referred to in the Contract Documents, the products of other manufacturers will be accepted, provided they equal or exceed the standards set forth in the drawings and specifications and are compatible with the intent and purpose of the design, subject to the written approval of the A/E. Such written approval must occur prior to the deadline established for the last scheduled addenda to be issued. The A/E's written approval will be in an issued addendum. If the descriptive material is not restrictive, the products of other manufacturers specified will be accepted without prior approval provided they are compatible with the intent and purpose of the design as determined by the A/E.

#### 14. Financial Responsibility of Contractors, Subcontractors and Sub-subcontractors

Contractors shall respond promptly to any inquiry in writing by DFCM to any concern of financial responsibility of the contractor, subcontractor or sub-subcontractor.

#### 15. <u>Debarment</u>

By submitting a bid, the Contractor certifies that neither it nor its principals, including project and site managers, have been, or are under consideration for, debarment or suspension, or any action that would exclude such from participation in a construction contract by any governmental department or agency. If the Contractor cannot certify this statement, attach to the bid a detailed written explanation which must be reviewed and approved by DFCM as part of the requirements for award of the Project.

#### **BID BOND**

(Title 63, Chapter 56, U. C. A. 1953, as Amended)

#### KNOW ALL PERSONS BY THESE PRESENTS:

the "Dringing!" and		hereinafter referred t	to as
the "Principal," and under the laws of the State of, with its business in this State and U. S. Department of the Treasury Listed Securities on Federal Bonds and as Acceptable Reinsuring Compa	a, (Circular 5 /0 anies): hereinat	of Companies Holding Certificates of Authority as Accept fter referred to as the "Surety." are held and firmly bound	unto
the STATE OF UTAH, hereinafter referred to as the "Obligee, accompanying bid), being the sum of this Bond to which paradministrators, successors and assigns, jointly and severally, firm	" in the amour yment the Prii mly by these p	nt of \$ (5% of ncipal and Surety bind themselves, their heirs, execur- presents.	f the tors,
THE CONDITION OF THIS OBLIGATION IS SU bid incorporated by reference herein, dated as shown, to enter into	JCH that where	reas the Principal has submitted to Obligee the accompan writing for the	
		Pro	oject.
NOW, THEREFORE, THE CONDITION OF TH execute a contract and give bond to be approved by the Obligee fin writing of such contract to the principal, then the sum of the damages and not as a penalty; if the said principal shall execut performance thereof within ten (10) days after being notified in woold. It is expressly understood and agreed that the liability of the penal sum of this Bond. The Surety, for value received, hereby so for a term of sixty (60) days from actual date of the bid opening	for the faithful ge amount state to a contract are vriting of such the Surety for an stipulates and a	ed above will be forfeited to the State of Utah as liquid nd give bond to be approved by the Obligee for the fair contract to the Principal, then this obligation shall be null ny and all defaults of the Principal hereunder shall be the	tified dated thful l and e full
<b>PROVIDED, HOWEVER,</b> that this Bond is executed as amended, and all liabilities on this Bond shall be determined length herein.		rovisions of Title 63, Chapter 56, Utah Code Annotated, 1 e with said provisions to same extent as if it were copie	
IN WITNESS WHEREOF, the above bounden parties below, the name and corporate seal of each corporate party representative, pursuant to authority of its governing body.		d this instrument under their several seals on the date indic affixed and these presents duly signed by its undersign	
DATED this day of	, 20		
Principal's name and address (if other than a corporation):		Principal's name and address (if a corporation):	
	_ _		
By:		Ву:	
Title:		Title:(Affix Corporate S	
		(Affix Corporate S	Seal)
		Surety's name and address:	
STATE OF)			
) ss		By:	~ *
COUNTY OF			
On this day of, 20, personally whose identity is personally known to me or proved to me on the that he/she is the Attorney-in-fact of the above-named Surety Complied in all respects with the laws of Utah in reference to become acknowledged to me that as Attorney-in-fact executed the same	Company, and oming sole sure	I that he/she is duly authorized to execute the same and	d has
Subscribed and sworn to before me this day of My Commission Expires: Resides at:			
Agazau		NOTARY PUBLIC	
Agency:			
Address:Phone:		Approved As To Form: May 25, 2 By Alan S. Bachman, Asst Attorney Ger	2005 neral





#### Division of Facilities Construction and

#### INSTRUCTIONS AND SUBCONTRACTORS LIST FORM

The three low bidders, as well as all other bidders that desire to be considered, are required by law to submit to DFCM within 24 hours of bid opening a list of <u>ALL</u> first-tier subcontractors, including the subcontractor's name, bid amount and other information required by Building Board Rule and as stated in these Contract Documents, on the following basis:

# PROJECTS UNDER \$500,000 - ALL SUBS \$20,000 OR OVER MUST BE LISTED PROJECTS \$500,000 OR MORE - ALL SUBS \$35,000 OR OVER MUST BE LISTED

- Any additional subcontractors identified in the bid documents shall also be listed.
- The DFCM Director may not consider any bid submitted by a bidder if the bidder fails to submit a subcontractor list meeting the requirements of State law.
- List subcontractors for base bid as well as the impact on the list that the selection of any alternate may have.
- Bidder may not list more than one subcontractor to perform the same work.
- Bidder must list "Self" if performing work itself.

#### **LICENSURE:**

The subcontractor's name, the type of work, the subcontractor's bid amount, and the subcontractor's license number as issued by DOPL, if such license is required under Utah Law, shall be listed. Bidder shall certify that all subcontractors, required to be licensed, are licensed as required by State law. A subcontractor includes a trade contractor or specialty contractor and does not include suppliers who provide <u>only</u> materials, equipment, or supplies to a contractor or subcontractor.

#### BIDDER LISTING 'SELF' AS PERFORMING THE WORK:

Any bidder that is properly licensed for the particular work and intends to perform that work itself in lieu of a subcontractor that would otherwise be required to be on the subcontractor list, must insert the term 'Self' for that category on the subcontractor list form. Any listing of 'Self' on the sublist form shall also include the amount allocated for that work.

#### **'SPECIAL EXCEPTION'**:

A bidder may list 'Special Exception' in place of a subcontractor when the bidder intends to obtain a subcontractor to perform the work at a later date because the bidder was unable to obtain a qualified or reasonable bid under the provisions of U.C.A.Section 63A-5-208(4). The bidder shall insert the term 'Special Exception' for that category of work, and shall provide documentation with the subcontractor list describing the bidder's efforts to obtain a bid of a qualified subcontractor at a reasonable cost and why the bidder was unable to obtain a qualified subcontractor bid. The Director must find that the bidder complied in good faith with State law requirements for any 'Special Exception' designation, in order for the bid to be considered. If awarded the contract, the Director shall supervise the bidder's efforts to obtain a qualified subcontractor bid. The amount of the awarded contract may not be adjusted to reflect the actual amount of the subcontractor's bid. Any listing of 'Special Exception' on the sublist form shall also include amount allocated for that work.

# INSTRUCTIONS AND SUBCONTRACTORS LIST FORM Page No. 2

#### **GROUNDS FOR DISQUALIFICATION:**

The Director may not consider any bid submitted by a bidder if the bidder fails to submit a subcontractor list meeting the requirements of State law. Director may withhold awarding the contract to a particular bidder if one or more of the proposed subcontractors are considered by the Director to be unqualified to do the Work or for such other reason in the best interest of the State of Utah. Notwithstanding any other provision in these instructions, if there is a good faith error on the sublist form, at the sole discretion of the Director, the Director may provide notice to the contractor and the contractor shall have 24 hours to submit the correction to the Director. If such correction is submitted timely, then the sublist requirements shall be considered met.

#### CHANGES OF SUBCONTRACTORS SPECIFICALLY IDENTIFIED ON SUBLIST FORM:

Subsequent to twenty-four hours after the bid opening, the contractor may change its listed subcontractors only after receiving written permission from the Director based on complying with all of the following criteria.

- (1) The contractor has established in writing that the change is in the best interest of the State and that the contractor establishes an appropriate reason for the change, which may include, but not is not limited to, the following reasons: the original subcontractor has failed to perform, or is not qualified or capable of performing, and/or the subcontractor has requested in writing to be released.
- (2) The circumstances related to the request for the change do not indicate any bad faith in the original listing of the subcontractors.
- (3) Any requirement set forth by the Director to ensure that the process used to select a new subcontractor does not give rise to bid shopping.
- (4) Any increase in the cost of the subject subcontractor work is borne by the contractor.
- Any decrease in the cost of the subject subcontractor work shall result in a deductive change order being issued for the contract for such decreased amount.
- (6) The Director will give substantial weight to whether the subcontractor has consented in writing to being removed unless the Contractor establishes that the subcontractor is not qualified for the work.

#### **EXAMPLE:**

Example of a list where there are only four subcontractors:

TYPE OF WORK	SUBCONTRACTOR, "SELF" OR "SPECIAL EXCEPTION"	SUBCONTRACTOR BID AMOUNT	CONT. LICENSE #
ELECTRICAL	ABCD Electric Inc.	\$350,000.00	123456789000
LANDSCAPING	"Self"	300,000.00	123456789000
CONCRETE (ALTERNATE #1)	XYZ Concrete Inc	298,000.00	987654321000
MECHANICAL	"Special Exception" (attach documentation)	Fixed at: 350,000.00	(TO BE PROVIDED AFTER OBTAINING SUBCONTRACTOR)

PURSUANT TO STATE LAW - SUBCONTRACTOR BID AMOUNTS CONTAINED IN THIS SUBCONTRACTOR LIST SHALL NOT BE DISCLOSED UNTIL THE CONTRACT HAS BEEN AWARDED.





PROJECT TITLE:

#### **Division of Facilities Construction and**

## SUBCONTRACTORS LIST FAX TO 801-538-3677

TYPE OF WORK	SUBCONTRACTOR, "SELF" OR "SPECIAL EXCEPTION"	SUBCONTRACTOR BID AMOUNT	CONT. LICENSE
alternates.	ctors as required by the instructions, including cial Exception" in accordance with the instructionately licensed as required by State law.		e bid as well as an
	FIRM:		
E:	SIGNED BY:		

NOTICE: FAILURE TO SUBMIT THIS FORM, PROPERLY COMPLETED AND SIGNED, AS REQUIRED IN THESE CONTRACT DOCUMENTS, SHALL BE GROUNDS FOR DFCMS REFUSAL TO ENTER INTO A WRITTEN CONTRACT WITH BIDDER. ACTION MAY BE TAKEN AGAINST BIDDERS BID BOND AS DEEMED APPROPRIATE BY DFCM. ATTACH A SECOND PAGE IF NECESSARY.

# **FUGITIVE DUST PLAN**

The Contractor will fill out the form and file the original with the Division of Air Quality and a copy of the form with the Division of Facilities Construction & Management, prior to the issuance of any notice to proceed.

The Contractor will be fully responsible for compliance with the Fugitive Dust Control Plan, including the adequacy of the plan, any damages, fines, liability, and penalty or other action that results from noncompliance.

# Utah Division of Air Quality April 20, 1999

# GUIDANCE THAT MUST BE CONSIDERED IN DEVELOPING AND SUBMITTING A DUST CONTROL PLAN FOR COMPLIANCE WITH R307-309-3, 4, 5, 6, 7

1.	Name of your operation (source): provide a name if the source is a construction site.
2.	Address or location of your operation or construction site.
3.	UTM coordinates or Longitude/Latitude of stationary emission points at your operation.
4.	Lengths of the project, if temporary (time period).
5.	Description of process (include all sources of dust and fugitive dust). Please, if necessary, use additional sheets of paper for this description. Be sure to mark it as an attachment.
6.	Type of material processed or disturbed.
7.	Amount of material processed (tons per year, tons per month, lbs./hr., and applicable units).

Destination of product (where will the material produced be used or transported, be specific, provide address or specific location), information needed for temporary relocation applicants.
Identify the individual who is responsible for the implementation and maintenance of fugitive dust control measures. List name(s), position(s) and telephone number(s).
List, and attach copies of any contract lease, liability agreement with other companies that may, or will, be responsible for dust control on site or on the project.

# **Description of Fugitive Dust Emission Activities** (Things to consider in addressing fugitive dust control strategies.)

1.	Type of activities (drilling and blasting, road construction, development construction, earth moving and excavation, handling and hauling materials, cleaning and leveling, etc).
2.	List type of equipment generating the fugitive dust.
3.	Diagram the location of each activity or piece of equipment on site. Please attach the diagram.
4.	Provide pictures or drawings of each activity. Include a drawing of the unpaved/paved road network used to move loads "on" and "off" property.
5.	Vehicle miles travels on unpaved roads associated with the activity (average speed).
6.	Type of dust emitted at each source (coal, cement, sand, soil, clay, dust, etc.)
7.	Estimate the size of the release area at which the activity occurs (square miles). For haul or dirt roads include total miles of road in use during the activity.

# **Description of Fugitive Dust Emission Controls on Site**

Control strategies must be designed to meet 20% opacity or less on site (a lesser opacity may be defined by Approval Order conditions or federal requirements such as NSPS), and control strategies must prevent exceeding 10% opacity from fugitive dust at the property boundary (site boundary) for compliance with R307-309-3.

1.	Types of ongoing emission controls proposed for each activity, each piece of equipment, and haul roads.
2.	Types of additional dust controls proposed for bare, exposed surfaces (chemical stabilization, synthetic cover, wind breaks, vegetative cover, etc).
3.	Method of application of dust suppressant.
4.	Frequency of application of dust suppressant.
5.	Explain what triggers the use of a special control measure other than routine measures already in place, such as covered loads or measures covered by a permit condition (increase in opacity, high winds, citizen complaints, dry conditions, etc).
6.	Explain in detail what control strategies/measures will be implemented off-hours, i.e., Saturdays/Sundays/Holidays, as well as 6 PM to 6 AM each day.

## **Description of Fugitive Dust Control Off-site**

Prevent, to the maximum extent possible, deposition of materials, which may create fugitive dust on public and private paved roads in compliance with R307-309-5, 6, 7.

- 1. Types of emission controls initiated by your operation that are in place "off" property (application of water, covered loads, sweeping roads, vehicle cleaning, etc.).
- 2. Proposed remedial controls that will be initiated promptly if materials, which may create fugitive dust, are deposited on public and private paved roads.

Phone: (801) 536-4000

(801) 536-4099

FAX:

Submit the Dust Control Plan to:

Executive Secretary Utah Air Quality Board POB 144820 15 North 1950 West Salt Lake City, Utah 84114-4820

## **Fugitive Dust Control Plan Violation Report**

When a source is found in violation of R307-309-3 or in violation of the Fugitive Dust Control Plan, the course must submit a report to the Executive Secretary within 15 days after receiving a Notice of Violation. The report must include the following information:

- 1. Name and address of dust source.
- 2. Time and duration of dust episode.
- 3. Meteorological conditions during the dust episode.
- 4. Total number and type of fugitive dust activities and dust producing equipment within each operation boundary. If no change has occurred from the existing dust control plan, the source should state that the activity/equipment is the same.
- 5. Fugitive dust activities or dust producing equipment that caused a violation of R-307-309-3 or the sources dust control plan.
- 6. Reasons for failing to control dust from the dust generating activity or equipment.
- 7. New and/or additional fugitive dust control strategies necessary to achieve compliance with R307-309-3, 4, 5, 6, or 7.
- 8. If it can not be demonstrated that the current approved Dust Control Plan can result in compliance with R307-309-3 through 7, the Dust Control Plan must be revised so as to demonstrate compliance with 307-309-3 through 7. Within 30 days of receiving a fugitive dust Notice of Violation, the source must submit the revised Plan to the Executive Secretary for review and approval.

Submit the Dust Control Plan to:

Executive Secretary Phone: (801) 536-4000 Utah Air Quality Board FAX: (801) 536-4099

POB 144820

15 North 1950 West

Salt Lake City, Utah 84114-4820

Attachments: DFCM Form FDR R-307-309, Rule 307-309

300/300/	/FVA/	/	/ /
	Project	 No.	

# **CONTRACTOR'S AGREEMENT**

FOR:
THIS CONTRACTOR'S AGREEMENT, made and entered into this day of, 20, by and between the DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT, hereinafter referred to as "DFCM", and, incorporated in the State of and authorized to do business in the State of Utah, hereinafter referred to as "Contractor", whose address is
WITNESSETH: WHEREAS, DFCM intends to have Work performed at
WHEREAS, Contractor agrees to perform the Work for the sum stated herein.
NOW, THEREFORE, DFCM and Contractor for the consideration provided in this Contractor's Agreement, agree as follows:
ARTICLE 1. SCOPE OF WORK. The Work to be performed shall be in accordance with the Contract Documents prepared by and entitled"
The DFCM General Conditions ("General Conditions") dated May 25, 2005 on file at the office of DFCM and available on the DFCM website, are hereby incorporated by reference as part of this Agreement and are included in the specifications for this Project. All terms used in this Contractor's Agreement shall be as defined in the Contract Documents, and in particular, the General Conditions.
The Contractor Agrees to furnish labor, materials and equipment to complete the Work as required in the Contract Documents which are hereby incorporated by reference. It is understood and agreed by the parties hereto that all Work shall be performed as required in the Contract Documents and shall be subject to inspection and approval of DFCM or its authorized representative. The relationship of the Contractor to the DFCM hereunder is that of an independent Contractor.
ARTICLE 2. CONTRACT SUM. The DFCM agrees to pay and the Contractor agrees to accept in full performance of this Contractor's Agreement, the sum of DOLLARS AND NO CENTS (\$00),
which is the base bid, and which sum also includes the cost of a 100% Performance Bond and a 100%

# CONTRACTOR'S AGREEMENT PAGE NO 2

Payment Bond as well as all insurance requirements of the Contractor. Said bonds have already been posted by the Contractor pursuant to State law. The required proof of insurance certificates have been delivered to DFCM in accordance with the General Conditions before the execution of this Contractor's Agreement.

ARTICLE 3. TIME OF COMPLETION AND DELAY REMEDY. The Work shall be Substantially Complete by \_\_\_\_\_\_. Contractor agrees to pay liquidated damages in the amount of \$\_\_\_\_\_ per day for each day after expiration of the Contract Time until the Contractor achieves Substantial Completion in accordance with the Contract Documents, if Contractor's delay makes the damages applicable. The provision for liquidated damages is: (a) to compensate the DFCM for delay only; (b) is provided for herein because actual damages can not be readily ascertained at the time of execution of this Contractor's Agreement; (c) is not a penalty; and (d) shall not prevent the DFCM from maintaining Claims for other non-delay damages, such as costs to complete or remedy defective Work.

No action shall be maintained by the Contractor, including its or Subcontractor or suppliers at any tier, against the DFCM or State of Utah for damages or other claims due to losses attributable to hindrances or delays from any cause whatsoever, including acts and omissions of the DFCM or its officers, employees or agents, except as expressly provided in the General Conditions. The Contractor may receive a written extension of time, signed by the DFCM, in which to complete the Work under this Contractor's Agreement in accordance with the General Conditions.

ARTICLE 4. CONTRACT DOCUMENTS. The Contract Documents consist of this Contractor's Agreement, the Conditions of the Contract (DFCM General Conditions, Supplementary and other Conditions), the Drawings, Specifications, Addenda and Modifications. The Contract Documents shall also include the bidding documents, including the Invitation to Bid, Instructions to Bidders/ Proposers and the Bid/Proposal, to the extent not in conflict therewith and other documents and oral presentations that are documented as an attachment to the contract.

All such documents are hereby incorporated by reference herein. Any reference in this Contractor's Agreement to certain provisions of the Contract Documents shall in no way be construed as to lessen the importance or applicability of any other provisions of the Contract Documents.

**ARTICLE 5. PAYMENT.** The DFCM agrees to pay the Contractor from time to time as the Work progresses, but not more than once each month after the date of Notice to Proceed, and only upon Certificate of the A/E for Work performed during the preceding calendar month, ninety-five percent (95%) of the value of the labor performed and ninety-five percent (95%) of the value of materials furnished in place or on the site. The Contractor agrees to furnish to the DFCM invoices for materials purchased and on the site but not installed, for which the Contractor requests payment and agrees to

# CONTRACTOR'S AGREEMENT PAGE NO. 3

safeguard and protect such equipment or materials and is responsible for safekeeping thereof and if such be stolen, lost or destroyed, to replace same.

Such evidence of labor performed and materials furnished as the DFCM may reasonably require shall be supplied by the Contractor at the time of request for Certificate of Payment on account. Materials for which payment has been made cannot be removed from the job site without DFCM's written approval. Five percent (5%) of the earned amount shall be retained from each monthly payment. The retainage, including any additional retainage imposed and the release of any retainage, shall be in accordance with UCA 13-8-5 as amended. Contractor shall also comply with the requirements of UCA 13-8-5, including restrictions of retainage regarding subcontractors and the distribution of interest earned on the retention proceeds. The DFCM shall not be responsible for enforcing the Contractor's obligations under State law in fulfilling the retention law requirements with subcontractors at any tier.

**ARTICLE 6. INDEBTEDNESS.** Before final payment is made, the Contractor must submit evidence satisfactory to the DFCM that all payrolls, materials bills, subcontracts at any tier and outstanding indebtedness in connection with the Work have been properly paid. Final Payment will be made after receipt of said evidence, final acceptance of the Work by the DFCM as well as compliance with the applicable provisions of the General Conditions.

Contractor shall respond immediately to any inquiry in writing by DFCM as to any concern of financial responsibility and DFCM reserves the right to request any waivers, releases or bonds from Contractor in regard to any rights of Subcontractors (including suppliers) at any tier or any third parties prior to any payment by DFCM to Contractor.

**ARTICLE 7. ADDITIONAL WORK.** It is understood and agreed by the parties hereto that no money will be paid to the Contractor for additional labor or materials furnished unless a new contract in writing or a Modification hereof in accordance with the General Conditions and the Contract Documents for such additional labor or materials has been executed. The DFCM specifically reserves the right to modify or amend this Contractor's Agreement and the total sum due hereunder either by enlarging or restricting the scope of the Work.

**ARTICLE 8. INSPECTIONS.** The Work shall be inspected for acceptance in accordance with the General Conditions.

**ARTICLE 9. DISPUTES.** Any dispute, PRE or Claim between the parties shall be subject to the provisions of Article 7 of the General Conditions. DFCM reserves all rights to pursue its rights and remedies as provided in the General Conditions.

**ARTICLE 10. TERMINATION, SUSPENSION OR ABANDONMENT.** This Contractor's Agreement may be terminated, suspended or abandoned in accordance with the General Conditions.

ARTICLE 11. DFCM'S RIGHT TO WITHHOLD CERTAIN AMOUNT AND MAKE USE THEREOF. The DFCM may withhold from payment to the Contractor such amount as, in DFCM's judgment, may be necessary to pay just claims against the Contractor or Subcontractor at any tier for labor and services rendered and materials furnished in and about the Work. The DFCM may apply such withheld amounts for the payment of such claims in DFCM's discretion. In so doing, the DFCM shall be deemed the agent of Contractor and payment so made by the DFCM shall be considered as payment made under this Contractor's Agreement by the DFCM to the Contractor. DFCM shall not be liable to the Contractor for any such payment made in good faith. Such withholdings and payments may be made without prior approval of the Contractor and may be also be prior to any determination as a result of any dispute, PRE, Claim or litigation.

**ARTICLE 12. INDEMNIFICATION.** The Contractor shall comply with the indemnification provisions of the General Conditions.

ARTICLE 13. SUCCESSORS AND ASSIGNMENT OF CONTRACT. The DFCM and Contractor, respectively bind themselves, their partners, successors, assigns and legal representatives to the other party to this Agreement, and to partners, successors, assigns and legal representatives of such other party with respect to all covenants, provisions, rights and responsibilities of this Contractor's Agreement. The Contractor shall not assign this Contractor's Agreement without the prior written consent of the DFCM, nor shall the Contractor assign any moneys due or to become due as well as any rights under this Contractor's Agreement, without prior written consent of the DFCM.

**ARTICLE 14. RELATIONSHIP OF THE PARTIES.** The Contractor accepts the relationship of trust and confidence established by this Contractor's Agreement and covenants with the DFCM to cooperate with the DFCM and A/E and use the Contractor's best skill, efforts and judgment in furthering the interest of the DFCM; to furnish efficient business administration and supervision; to make best efforts to furnish at all times an adequate supply of workers and materials; and to perform the Work in the best and most expeditious and economic manner consistent with the interests of the DFCM.

**ARTICLE 15. AUTHORITY TO EXECUTE AND PERFORM AGREEMENT.** Contractor and DFCM each represent that the execution of this Contractor's Agreement and the performance thereunder is within their respective duly authorized powers.

**ARTICLE 16. ATTORNEY FEES AND COSTS.** Except as otherwise provided in the dispute resolution provisions of the General Conditions, the prevailing party shall be entitled to reasonable attorney fees and costs incurred in any action in the District Court and/or appellate body to enforce this Contractor's Agreement or recover damages or any other action as a result of a breach thereof.

# CONTRACTOR'S AGREEMENT PAGE NO. 5

**IN WITNESS WHEREOF**, the parties hereto have executed this Contractor's Agreement on the day and year stated hereinabove.

	CONTRACTOR:	
	Signature	Date
	Title:	
State of)		
County of)	Please type/print name clearly	
On this day of, 20, pers whose identity is personally known to me (or who by me duly sworn (or affirmed), did say the firm and that said document was signed by	proved to me on the basis of satisfactory evi	idence) and
(CEAL)	Notary Public	
(SEAL)	My Commission Expires	
APPROVED AS TO AVAILABILITY OF FUNDS:	DIVISION OF FACILITIES CONSTRUCTION AND MANAGE	EMENT
David D. Williams, Jr. Date DFCM Administrative Services Director	Manager Capital Development/Improvements	Date
APPROVED AS TO FORM: ATTORNEY GENERAL November 30, 2006	APPROVED FOR EXPENDITURE:	
By: Alan S. Bachman Asst Attorney General	Division of Finance	Date

## PERFORMANCE BOND

(Title 63, Chapter 56, U. C. A. 1953, as Amended)

That	hereinafter referred to a	is the "Principal" and
	, a corporation organized and existing under the	
, with its principal office in the City of		
Listed (Circular 570, Companies Holding Certificates of Authority a		
hereinafter referred to as the "Surety," are held and firmly bound unto		
	DOLLARS (\$) for the	e payment whereof, the
said Principal and Surety bind themselves and their heirs, administrate	rs, executors, successors and assigns, jointly and severally, firmly	y by these presents.
WUEDEAS the Dringing loss entered into a certain writte	n Contract with the Obligee, dated the day of	20 to
WHEREAS, the Principal has entered into a certain written	n Contract with the Obligee, dated the day of	, 20, 10
in the County of State of Litab Project No.	for the approximate sum of	
in the county of, State of Otali, I toject No	, for the approximate sum of	) which
in the County of, State of Utah, Project No  Contract is hereby incorporated by reference herein.	Donais (ψ	
NOW, THEREFORE, the condition of this obligation is s Contract Documents including, but not limited to, the Plans, Specifica Contract as said Contract may be subject to Modifications or changes,		, and the terms of the
No right of action shall accrue on this bond to or for the us administrators or successors of the Owner.	e of any person or corporation other than the state named herein	or the heirs, executors
The parties agree that the dispute provisions provided in the	Contract Documents apply and shall constitute the sole dispute pr	ocedures of the parties
<b>PROVIDED, HOWEVER,</b> that this Bond is executed pur and all liabilities on this Bond shall be determined in accordance with	suant to the Provisions of Title 63, Chapter 56, Utah Code Annota said provisions to the same extent as if it were copied at length h	
IN WITNESS WHEREOF, the said Principal and Surety	have signed and sealed this instrument this day of	, 20
WITNESS OR ATTESTATION:	PRINCIPAL:	
	By:	(Seal)
	Tiuc.	
WITNESS OR ATTESTATION:	SURETY:	
	Ву:	
STATE OF)	Attorney-in-Fact	(Seal
) ss.		
COUNTY OF)		
coolli oi		
On this day of, 20, personally app	peared before me	, whose
identity is personally known to me or proved to me on the basis of sati	sfactory evidence, and who, being by me duly sworn, did say that	t he/she is the Attorney
in-fact of the above-named Surety Company and that he/she is duly a		
reference to becoming sole surety upon bonds, undertakings and oblig	ations, and that he/she acknowledged to me that as Attorney-in-fe	act executed the same.
Subscribed and sworn to before me this day of	20	
Subscribed and sworn to before me this day of	, 20	
My commission expires:		
Resides at:		
	NOTARY PUBLIC	
Agency:		
Agent:		
Address:	Approved As To F	Form: May 25, 2005
Phone:	By Alan S. Bachman, As	sst Attorney General

# PAYMENT BOND

(Title 63, Chapter 56, U. C. A. 1953, as Amended)

#### KNOW ALL PERSONS BY THESE PRESENTS:

That		hereinafter referred to		
	, a corporation organized and existing			
	e Treasury Listed (Circular 570, Comparinganies); with its principal office in the Circular 570, Comparing 1997 (1997).			
	r referred to as the "Obligee," in the amou			
Dollars (\$	) for the payment whereof, the said F	Principal and Surety bind themselves and	their heirs, administrators	executors, successors
	erally, firmly by these presents.			,
WHEREAS, the	e Principal has entered into a certain writt	ten Contract with the Obligee, dated the _	day of	, 20,
in the County of	State of Utah Project No.	for the approximate su	m of	
in the county of	Principal has entered into a certain writt, State of Utah, Project No erein.		), which	contract is hereby
incorporated by reference he	erein.			
or Principal's Subcontractor	FORE, the condition of this obligation is s s in compliance with the provisions of Titl Contract, then, this obligation shall be voice.	le 63, Chapter 56, of Utah Code Annotated	d, 1953, as amended, and ir	
of the Contract or to the Wor and does hereby waive notice	to this Bond, for value received, hereby stick to be performed thereunder, or the specifie of any such changes, extensions of time they shall become part of the Contract Do	fications or drawings accompanying same e, alterations or additions to the terms of the	shall in any way affect its o	bligation on this Bond
	OWEVER, that this Bond is executed purshall be determined in accordance with sai			
IN WITNESS V	VHEREOF, the said Principal and Surety	y have signed and sealed this instrument	thisday of	, 20
WITNESS OR ATTESTA	TION:	PRINCIPAL:		
WITNESS OR ATTESTA	TION:			(Seal)
		By:		
STATE OF	)	Attorney-in-Fac		(Seal)
COUNTY OF	) ss. )			
On this	day of, 20_			
authorized to execute the sa	rho, being by me duly sworn, did say that hame and has complied in all respects wit acknowledged to me that as Attorney-in-	th the laws of Utah in reference to become	e-named Surety Company,	and that he/she is duly
Subscribed and sworn to be	fore me this day of	, 20		
		VOTA BY BY BY		
		NOTARY PUBLIC		
			Approved As To By Alan S. Bachman,	Form: May 25, 2005 Asst Attorney General

Phone: \_





# Division of Facilities Construction and Management

CHA	ANGE ORDER	. #					
CONT	RACTOR:		PR PR	ENCY OR INST OJECT NAME: OJECT NUMBE ONTRACT NUMI	ER:		
ARCH	IITECT:		DA	TE:			
	CONSTRUCTION	PROPOSAL	AMC	UNT	DA	YS	
	CHANGE DIRECTIVE NO.	REQUEST NO.	INCREASE	DECREASE	INCREASE	DECREASE	
		<u> </u>					
				Amount	Days	Date	_ 
	ORIGINAL CONTRA						
	TOTAL PREVIOUS		ERS				
	TOTAL THIS CHAN						
	ADJUSTED CONTR	RACT					
shall c indired	I and Contractor agree constitute the full accord ct costs and effects rel scope of the Work and	rd and satisfactio ated to, incidenta	n, and complete	adjustment to t	he Contract and	l includes all dire	ect and
Contra	actor:					-1-	
Archite	ect/Engineer:					ate	
Agenc	cy or Institution:					ate	
DFCM	1:				D	ate 	
	ng Verification:					ate	
					D	ate	nage(s)

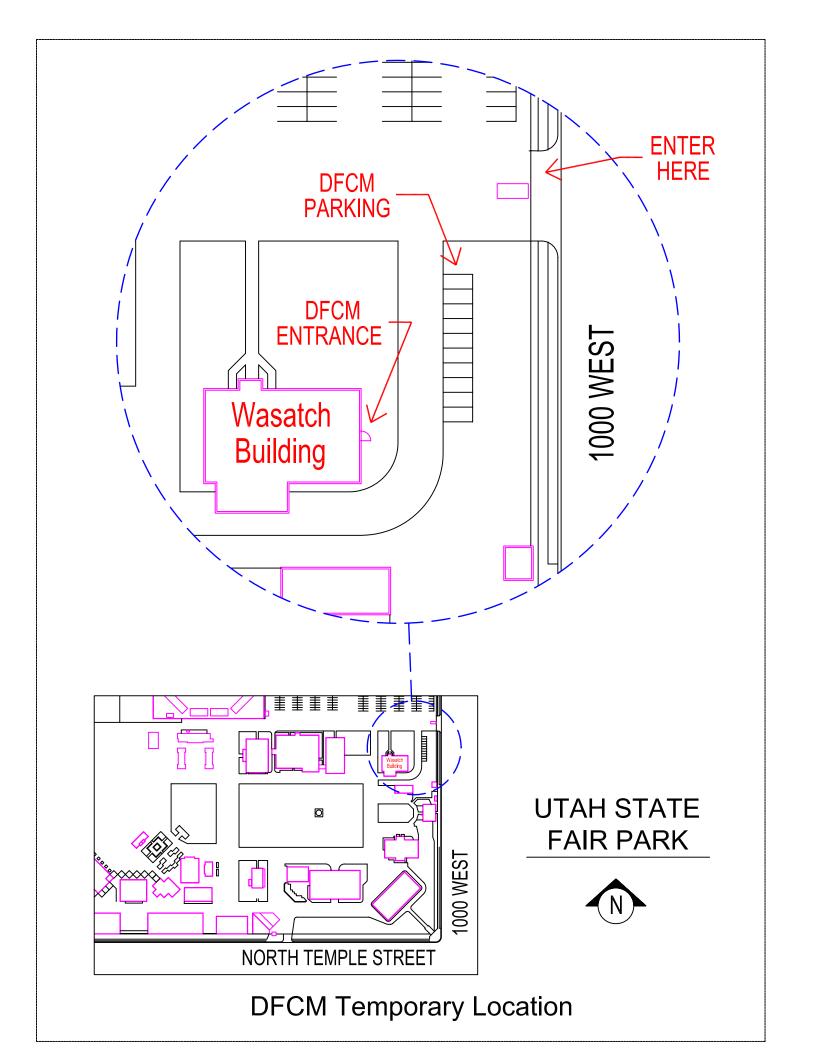


# **Division of Facilities Construction and Management**

**DFCM** 

## CERTIFICATE OF SUBSTANTIAL COMPLETION

PROJECT	PROJECT NO:		
AGENCY/INSTITUTION			
AREA ACCEPTED			
The Work performed under the subject Cont defined in the General Conditions; including Documents, as modified by any change orders area of the Project for the use for which it is	that the care agreed to b	onstruction is sufficiently co	ompleted in accordance with the Contract
The DFCM - (Owner) accepts the Project of possession of the Project or specified area of			
The DFCM accepts the Project for occupancy utilities and insurance, of the Project subject			
The Owner acknowledges receipt of the follo  ☐ As-built Drawings ☐ O & M Man		out and transition materials:   Warranty Documents	☐ Completion of Training Requirements
A list of items to be completed or corrected (Presponsibility of the Contractor to complete changes thereof. The amount of completion of the punch list work.	all the Wo	ork in accordance with the C	Contract Documents, including authorized
The Contractor shall complete or correct thecalendar days from the above date of issitems noted and agreed to shall be: \$has the right to be compensated for the delays the retained project funds. If the retained project promptly reimbursed for the balance of the fundamental project funds.	and/or comect funds ar	nis Certificate. The amount If the list of items is not couplete the work with the help to e insufficient to cover the delater.	withheld pending completion of the list of mpleted within the time allotted the Owner of independent contractor at the expense of
CONTRACTOR (include name of firm)	by:	(Signature)	DATE
A/E (include name of firm)	by:	(Signature)	DATE
USING INSTITUTION OR AGENCY	by:	(Signature)	DATE
	by:		
DFCM (Owner)		(Signature)	DATE
4110 State Office Building, Salt Lake City, Utah telephone 801-538-3018 • facsimile 801-538-3267		m.utah.gov	Parties Noted DFCM, Director



# **Technical Specification For**

Utah Valley State College Plaza Improvements

**DFCM** 

07 June 2007

P+A Architects
821 Kensington Avenue
Salt Lake City, Utah 84105



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BID PROPOSAL FORM

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NOT USED

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Utah Valley State College Plaza Improvements Division of Facilities Construction Management

#### SECTION 01010 - SUMMARY OF WORK

#### PART I - GENERAL

#### I.I RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division I Specification Sections, apply to this Section.

#### 1.2 WORK COVERED BY CONTRACT DOCUMENTS

- A. The Project consists of demolition of the existing asphalt plaza and providing a new concrete plaza deck. Included in the scope of work is some minor plumbing and an add alternate for electrical work
  - 1. Project Location: Utah Valley State College, Orem, Utah.
  - 2. Owner: State of Utah
- B. Contract Documents were prepared for the Project by :

P+A Architects
821 East Kensington Avenue
Salt Lake City, Utah 84105

Phone: 801.484.1161 Fax: 801.485.4640

**E:** parchitects@comcast.net

- C. The Work consists of a.
  - The Work includes the demolition of the existing asphalt plaza and providing a new concrete plaza deck. Included in the scope of work is some minor plumbing and an add alternate for electrical work
    - A. The contractor is responsible for the complete execution of the Contract Documents as indicated and specified. He is responsible for the work performed, the acts and omissions of his sub-contractors and suppliers and of persons either directly or indirectly employed by them, as well as the work, acts and omissions of persons directly employed by him.
    - B. Provide, without additional charge, all incidental items required to complete the work even though not specifically indicated. Install all work so that its several component parts function together as a workable system, and in working order.
    - C. Conform to the highest quality standards for materials and workmanship as required to execute work indicated, specified and necessary to fully satisfy the Contract requirements for a complete, finished and acceptable installation.
    - D. The contractor is responsible to verify all field measurements of actual site conditions so that all work fits properly in the locations indicated and specified. Protect existing structures, improvements, landscaping, etc. from physical damage.
    - E. Upon completion of the project, dismantle and remove from the site all construction materials.
    - F. Any existing items which are damaged by the contractor shall be restored to their original or better condition to the satisfaction of the Owner.

SUMMARY OF WORK 01010 - I

#### 1.3 CONTRACTOR USE OF PREMISES

- A. General: During the construction period the Contractor shall have full use of the exterior premises for construction operations, including use of the site as noted on site plan.
- B. Use of the Site: Limit use of the premises to work in areas indicated. Confine operations to areas within contract limits indicated. Do not disturb portions of the site beyond the areas in which the Work is indicated.
  - 1. Owner Occupancy: Allow for Owner occupancy and use by the public.
  - 2. Driveways and Entrances: Keep driveways and entrances serving the premises clear and available to the Owner, the Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.
- C. Use of the Existing Building: Maintain the existing building in a <u>weathertight</u> condition throughout the construction period. Repair damage caused by construction operations. Take all precautions necessary to protect the building and its occupants during the construction period.

### I.4 OCCUPANCY REQUIREMENTS

A. Full Owner Occupancy: The Owner will occupy the site and existing building during the entire construction period. Cooperate with the Owner during construction operations to minimize conflicts and facilitate owner usage. Perform the Work so as not to interfere with the Owner's operations.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.1 SCHEDULE OF PRODUCTS ORDERED IN ADVANCE

**END OF SECTION 01010** 

SUMMARY OF WORK 01010 - 2

#### **SECTION 01030 - ALTERNATES**

#### PART I - GENERAL

#### I.I RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division I Specification Sections, apply to this Section.

#### I.2 SUMMARY

A. This Section includes administrative and procedural requirements governing Alternates.

### 1.3 DEFINITIONS

- A. Definition: An alternate is an amount proposed by bidders and stated on the Bid Form for certain work defined in the Bidding Requirements that may be added to or deducted from the Base Bid amount if the Owner decides to accept a corresponding change in either the amount of construction to be completed, or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.
  - 1. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate the Alternate into the Work. No other adjustments are made to the Contract Sum.

# 1.4 PROCEDURES

- A. Coordination: Modify or adjust affected adjacent Work as necessary to completely and fully integrate that Work into the Project.
  - Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not mentioned as part of the Alternate.
- B. Notification: Immediately following the award of the Contract, notify each party involved, in writing, of the status of each alternate. Indicate whether alternates have been accepted, rejected, or deferred for later consideration. Include a complete description of negotiated modifications to alternates.
- C. Execute accepted alternates under the same conditions as other Work of this Contract.
- D. Schedule: A "Schedule of Alternates" is included at the end of this Section. Specification Sections referenced in the Schedule contain requirements for materials necessary to achieve the Work described under each alternate.

# PART 2 - PRODUCTS (Not Applicable)

ALTERNATES 01030 - I

# PART 3 - EXECUTION

# 3.1 SCHEDULE OF ALTERNATES

A. Alternate No. I: Provide and install light bollards, conduit, connectors, required breakers, time clocks, photocells and all required items for the proper installation of plaza bollard lighting as shown on drawing A-NP102

**END OF SECTION 01030** 

ALTERNATES 01030 - 2

#### SECTION 01040 - COORDINATION

#### PART I - GENERAL

#### I.I RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division I Specification Sections, apply to this Section.

### 1.2 SUMMARY warning

- A. This Section includes administrative and supervisory requirements necessary for coordinating construction operations including, but not necessarily limited to, the following:
  - I. General project coordination procedures.
  - 2. Conservation.
  - 3. Coordination Drawings.
  - 4. Administrative and supervisory personnel.
  - 5. Cleaning and protection.
- B. Related Sections: The following Sections contain requirements that relate to this Section:
  - I. Division I Section "Project Meetings" for progress meetings, coordination meetings, and preinstallation conferences.
  - 2. Division I Section "Submittals" for preparing and submitting the Contractor's Construction Schedule.
  - 3. Division I Section "Materials and Equipment" for coordinating general installation.
  - 4. Division I Section "Contract Closeout" for coordinating contract closeout.

### 1.3 COORDINATION

- A. Coordinate construction operations included in various Sections of these Specifications to assure efficient and orderly installation of each part of the Work. Coordinate construction operations included under different Sections that depend on each other for proper installation, connection, and operation.
  - Schedule construction operations in the sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
  - 2. Coordinate installation of different components to assure maximum accessibility for required maintenance, service, and repair.
  - 3. Make provisions to accommodate items scheduled for later installation.
- B. Where necessary, prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and attendance at meetings.

COORDINATION 01040 - I

- Prepare similar memoranda for the Owner and separate contractors where coordination of their work is required.
- C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities to avoid conflicts and assure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
  - I. Preparation of schedules.
  - 2. Installation and removal of temporary facilities.
  - 3. Delivery and processing of submittals.
  - 4. Progress meetings.
  - 5. Project closeout activities.

#### I.4 SUBMITTALS

- A. Coordination Drawings: Prepare coordination drawings where careful coordination is needed for installation of products and materials fabricated by separate entities.
  - 1. Show the relationship of components shown on separate Shop Drawings.
  - 2. Indicate required installation sequences.
  - 3. Comply with requirements contained in Section "Submittals."
- B. Staff Names: Within 15 days of commencement of construction operations, submit a list of the Contractor's principal staff assignments, including the superintendent and other personnel in attendance at the Project Site. Identify individuals and their duties and responsibilities. List their addresses and telephone numbers.

# PART 2 - PRODUCTS (Not Applicable)

### PART 3 - EXECUTION

### 3.1 GENERAL COORDINATION PROVISIONS

- A. Inspection of Conditions: Require the Installer of each major component to inspect both the substrate and conditions under which Work is to be performed. Do not proceed until unsatisfactory conditions have been corrected in an acceptable manner.
- B. Coordinate temporary enclosures with required inspections and tests to minimize the necessity of uncovering completed construction for that purpose.

# 3.2 CLEANING AND PROTECTION

A. Clean and protect construction in progress and adjoining materials in place, during handling and installation. Apply protective covering where required to assure protection from damage or deterioration at Substantial Completion.

COORDINATION 01040 - 2

- B. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to assure operability without damaging effects.
- C. Limiting Exposures: Supervise construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period. Where applicable, such exposures include, but are not limited to, the following:
  - I. Excessive static or dynamic loading.
  - 2. Excessive internal or external pressures.
  - 3. Excessively high or low temperatures.
  - 4. Thermal shock.
  - 5. Excessively high or low humidity.
  - 6. Air contamination or pollution.
  - 7. Water or ice.
  - 8. Solvents.
  - 9. Chemicals.
  - 10. Light.
  - 11. Radiation.
  - 12. Puncture.
  - 13. Abrasion.
  - 14. Heavy traffic.
  - 15. Soiling, staining, and corrosion.
  - 16. Bacteria.
  - 17. Rodent and insect infestation.
  - 18. Combustion.
  - 19. Electrical current.
  - 20. High-speed operation.
  - 21. Unusual wear or other misuse.
  - 22. Contact between incompatible materials.
  - 23. Misalignment.
  - 24. Excessive weathering.
  - 25. Unprotected storage.
  - 26. Improper shipping or handling.
  - 27. Theft.
  - 28. Vandalism.

END OF SECTION 01040

COORDINATION 01040 - 3

# SECTION 01200 - PROJECT MEETINGS

#### PART I - GENERAL

#### I.I RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division I Specification Sections, apply to this Section.

#### I.2 SUMMARY

- A. This Section specifies administrative and procedural requirements for project meetings, including, but not limited to, the following:
  - Preconstruction conferences.
  - Preinstallation conferences.
  - 3. Progress meetings.
  - 4. Coordination meetings.
- B. Related Sections: The following Sections contain requirements that relate to this Section:
  - Division I Section "Coordination" for procedures for coordinating project meetings with other construction activities.
  - 2. Division I Section "Submittals" for submitting the Contractor's Construction Schedule.
  - 3. Division 7 Section "TPO Roofing" for preinstallation roofing conferences.

# 1.3 PRECONSTRUCTION CONFERENCE

- A. Schedule a preconstruction conference before starting construction, at a time convenient to the Owner and the Architect, but no later than 15 days after execution of the Agreement. Hold the conference at the Project Site. Conduct the meeting to review responsibilities and personnel assignments.
- B. Attendees: Authorized representatives of the Owner, Architect, Engineer the Contractor and its superintendent; major subcontractors; and other concerned parties shall attend the conference. All participants at the conference shall be familiar with the Project and authorized to conclude matters relating to the Work.
- C. Agenda: Discuss items of significance that could affect progress, including the following:
  - I. Tentative construction schedule.
  - 2. Critical work sequencing.
  - 3. Designation of responsible personnel.
  - 4. Procedures for processing field decisions and Change Orders.
  - 5. Procedures for processing interpretation and modifications.
  - 6. Procedures for processing Applications for Payment.
  - 7. Distribution of Contract Documents.
  - 8. Submittal of Shop Drawings, Product Data, and Samples, Quality Assurance/Control Submittals.
  - 9. Preparation of record documents and O & M manuals.

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- 10. Use of the premises.
- 11. Parking availability.
- 12. Office, work, and storage areas.
- 13. Equipment deliveries and priorities.
- 14. Safety procedures.
- 15. First aid.
- Security.
- Housekeeping.
- 18. Working hours.
- 19. Resolving current problems
- 20. Further orientation as to requirements of contract documents
- 21. Engineer's responsibility to owner for inspection.
- 22. Working out general schedule of Engineer's inspection.
- D. Engineer will record significant discussions and agreements and disagreements of each meeting and distribute minutes of meeting to everyone concerned, including Owner, within three working days.

# 1.4 PREINSTALLATION CONFERENCES

- A. Conduct a preinstallation conference at the Project Site before work begins to discuss roofing, roofing insulation, masonry, roof drainage installation.
- B. Attendees: The Installer and representatives of manufacturers and fabricators involved in or affected by the installation, and its coordination or integration with other materials and installations that have preceded or will follow, shall attend the meeting. Advise the Architect of scheduled meeting dates.
  - I. Review the progress of other construction activities and preparations for the particular activity under consideration at preinstallation conference, including requirements for the following:
    - a. Contract Documents.
    - b. Options.
    - c. Related Change Orders.
    - d. Purchases.
    - e. Deliveries.
    - f. Shop Drawings, Product Data, and quality-control samples.
    - g. Possible conflicts.
    - h. Compatibility problems.
    - i. Time schedules.
    - j. Weather limitations.
    - k. Manufacturer's recommendations.
    - I. Warranty requirements.
    - m. Compatibility of materials.
    - n. Acceptability of substrates.
    - o. Temporary facilities.
    - p. Space and access limitations.
    - q. Governing regulations.
    - r. Safety.
    - s. Inspecting and testing requirements.
    - t. Required performance results.
    - u. Recording requirements.
    - v. Protection.

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- 2. Record significant discussions and agreements and disagreements of each conference, and the approved schedule. Promptly distribute the record of the meeting to everyone concerned, including the Owner and the Architect.
- 3. Do not proceed with the installation if the conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of Work and reconvene the conference at the earliest feasible date.

#### 1.5 PROGRESS MEETINGS

- A. Progress meetings at the Project Site will be conducted at weekly intervals. The Architect and owner will notify general contractor of scheduled meeting dates. Coordinate dates of meetings with preparation of the payment request.
- B. Attendees: In addition to representatives of the Owner and Architect, Engineer, each subcontractor, supplier, or other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the conference shall be familiar with the Project and authorized to conclude matters relating to the Work.
- C. Agenda: Review and correct or approve minutes of the previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to the status of the Project.
  - 1. Contractor's Construction Schedule: Review progress since the last meeting. Determine where each activity is in relation to the Contractor's Construction Schedule, whether on time or ahead or behind schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to insure that current and subsequent activities will be completed within the Contract Time.
  - 2. Review the present and future needs of each entity present, including the following:
    - a. Interface requirements.
    - b. Time.
    - c. Sequences.
    - d. Status of submittals.
    - e. Deliveries.
    - f. Off-site fabrication problems.
    - g. Access.
    - h. Site utilization.
    - i. Temporary facilities and services.
    - j. Hours of work.
    - k. Hazards and risks.
    - Housekeeping.
    - m. Quality and work standards.
    - n. Modifications
    - o. Change Orders.
    - p. Documentation of information for payment requests.
- D. Reporting: The Architect shall distribute minutes of the meeting to each party present and to parties who should have been present. Include a brief summary, in narrative form, of progress since the previous meeting and report.
  - I. Schedule Updating: Revise the Contractor's Construction Schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue the revised schedule concurrently with the report of each meeting, including owner

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### I.6 COORDINATION MEETINGS

- A. The contractor shall conduct project coordination meetings at required intervals convenient for all parties involved. Project coordination meetings are in addition to specific meetings held for other purposes, such as regular progress meetings and special preinstallation meetings.
- B. Engineer will include brief summary, in narrative form, of progress since previous meeting. By three days after each progress meeting date, Engineer will distribute copies of minutes of meeting to each party present and to parties who should have been present, including Owner.
- C. Request representation at each meeting by every party currently involved in coordination or planning for the construction activities involved.
- D. Record meeting results and distribute copies to everyone in attendance and to others affected by decisions or actions resulting from each meeting.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION 01200

PROJECT MEETINGS 01200 - 4

#### SECTION 01300 - SUBMITTALS

#### **GENERAL**

### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

# 1.2 SUMMARY

A. This Section includes administrative and procedural requirements for submittals required for performance of the Work, including the following:

Daily construction reports.

- 2. Shop Drawings.
- 3. Product Data.
- 4. Samples.
- 5. Quality assurance submittals.
- B. Administrative Submittals: Refer to other Division 1 Sections and other Contract Documents for requirements for administrative submittals. Such submittals include, but are not limited to, the following:

# Permits.

- 2. Applications for Payment.
- 3. Performance and payment bonds.
- 4. Insurance certificates.
- 5. List of subcontractors.
- C. Related Sections: The following Sections contain requirements that relate to this Section:
  - Division 1 Section "Applications for Payment" specifies requirements for submittal of the Schedule of Values.
  - Division 1 Section "Coordination" specifies requirements governing preparation and submittal of required Coordination Drawings.
  - 3. Division 1 Section "Project Meetings" specifies requirements for submittal and distribution of meeting and conference minutes.
  - Division 1 Section "Quality Control" specifies requirements for submittal of inspection and test reports.
  - Division 1 Section "Contract Closeout" specifies requirements for submittal of Project Record Documents and warranties at project closeout.

### 1.3 DEFINITIONS

A. Coordination Drawings show the relationship and integration of different construction elements that require careful coordination during fabrication or installation to fit in the space provided or to function as intended.

- Preparation of Coordination Drawings is specified in Division 1 Section "Coordination" and may include components previously shown in detail on Shop Drawings or Product Data.
- B. Field samples are full-size physical examples erected on-site to illustrate finishes, coatings, or finish materials. Field samples are used to establish the standard by which the Work will be judged.

Mockups are full-size assemblies for review of construction, coordination, testing, or operation; they are not Samples.

#### 1.4 SUBMITTAL PROCEDURES

Coordination: Coordinate preparation and processing of submittals with performance of construction activities. Transmit each submittal sufficiently in advance of performance of related construction activities to avoid delay.

 Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.

Coordinate transmittal of different types of submittals for related elements of the Work so processing will not be delayed by the need to review submittals concurrently for coordination.

a. The Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until all related submittals are received.

Processing: To avoid the need to delay installation as a result of the time required to process submittals, allow sufficient time for submittal review, including time for resubmittals.

Allow 2 weeks for initial review. Allow additional time if the Architect must delay processing to permit coordination with subsequent submittals.

- b. If an intermediate submittal is necessary, process the same as the initial submittal.
- c. Allow 2 weeks for reprocessing each submittal.
- d. No extension of Contract Time will be authorized because of failure to transmit submittals to the Architect sufficiently in advance of the Work to permit processing.
- B. Submittal Preparation: Place a permanent label or title block on each submittal for identification. Indicate the name of the entity that prepared each submittal on the label or title block.

Provide a space approximately 4 by 5 inches on the label or beside the title block on Shop Drawings to record the Contractor's review and approval markings and the action taken.

Include the following information on the label for processing and recording action taken.

Project name.

- b. Date.
- c. Name and address of the Architect.
- d. Name and address of the Contractor.
- e. Name and address of the subcontractor.

- f. Name and address of the supplier.
- g. Name of the manufacturer.
- h. Number and title of appropriate Specification Section.
- i. Drawing number and detail references, as appropriate.

Submittal Transmittal: Package each submittal appropriately for transmittal and handling. Transmit each submittal from the Contractor to the Architect using a transmittal form. The Architect will not accept submittals received from sources other than the Contractor.

On the transmittal, record relevant information and requests for data. On the form, or separate sheet, record deviations from Contract Document requirements, including variations and limitations. Include Contractor's certification that information complies with Contract Document requirements.

Transmittal Form: Use AIA Document G810.

# 1.5 CONTRACTOR'S CONSTRUCTION SCHEDULE

- Bar-Chart Schedule: Prepare a fully developed, horizontal bar-chart-type, contractor's construction schedule. Submit within 5 days after the date established for "Commencement of the Work."
  - 1. Provide a separate time bar for each significant construction activity. Provide a continuous vertical line to identify the first working day of each week. Use the same breakdown of units of the Work as indicated in the "Schedule of Values."
  - Within each time bar, indicate estimated completion percentage in 10 percent increments. As Work progresses, place a contrasting mark in each bar to indicate Actual Completion.
  - 3. Prepare the schedule on a sheet, or series of sheets, of stable transparency, or other reproducible media, of sufficient width to show data for the entire construction period.
  - 4. Secure time commitments for performing critical elements of the Work from parties involved. Coordinate each element on the schedule with other construction activities; include minor elements involved in the sequence of the Work. Show each activity in proper sequence. Indicate graphically the sequences necessary for completion of related portions of the Work.
  - 5. Indicate completion in advance of the date established for Substantial Completion. Indicate Substantial Completion on the schedule to allow time for the Architect's procedures necessary for certification of Substantial Completion.
- Work Stages: Indicate important stages of construction for each major portion of the Work, including submittal review, testing, and installation.
- Distribution: Following response to the initial submittal, print and distribute copies to the Architect, Owner, subcontractors, and other parties required to comply with scheduled dates.
- D. Schedule Updating: Revise the schedule after each meeting, event, or activity where revisions have been recognized or made. Issue the updated schedule concurrently with the report of each meeting.

Prepare a daily construction report recording the following information concerning events at the site, and submit duplicate copies to the Architect at weekly intervals:

List of subcontractors at the site.

- 2. High and low temperatures, general weather conditions.
- 3. Accidents and unusual events.
- 4. Meetings and significant decisions.
- 5. Stoppages, delays, shortages, and losses.
- 6. Emergency procedures.
- 7. Orders and requests of governing authorities.
- 8. Change Orders received, implemented.
- 9. Services connected, disconnected.
- 10. Equipment or system tests and startups.
- 11. Partial Completions, occupancies.
- 12. Substantial Completions authorized.

#### SHOP DRAWINGS

- Submit newly prepared information drawn accurately to scale. Highlight, encircle, or otherwise indicate deviations from the Contract Documents. Do not reproduce Contract Documents or copy standard information as the basis of Shop Drawings. Standard information prepared without specific reference to the Project is not a Shop Drawing.
- B. Shop Drawings include fabrication and installation Drawings, setting diagrams, schedules, patterns, templates and similar Drawings. Include the following information:

#### Dimensions.

- 2. Identification of products and materials included by sheet and detail number.
- 3. Compliance with specified standards.
- 4. Notation of coordination requirements.
- 5. Notation of dimensions established by field measurement.
- Sheet Size: Except for templates, patterns and similar full-size Drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches but no larger than 36 by 48.
- Final Submittal: Submit 5 blue- or black-line prints where required for maintenance manuals. The Architect will retain 2 prints and return the remainder.
- 8. Do not use Shop Drawings without an appropriate final stamp indicating action taken.

### 1.8 PRODUCT DATA

- Collect Product Data into a single submittal for each element of construction or system. Product Data includes printed information, such as manufacturer's installation instructions, catalog cuts, standard color charts, roughing-in diagrams and templates, standard wiring diagrams, and performance curves.
  - 1. Mark each copy to show applicable choices and options. Where printed Product Data includes information on several products that are not required, mark copies to indicate the applicable information. Include the following information:

Manufacturer's printed recommendations.

- b. Compliance with trade association standards.
- c. Compliance with recognized testing agency standards.
- d. Application of testing agency labels and seals.

- e. Notation of dimensions verified by field measurement.
- f. Notation of coordination requirements.
- 2. Do not submit Product Data until compliance with requirements of the Contract Documents has been confirmed.
- Preliminary Submittal: Submit a preliminary single copy of Product Data where selection of options is required.
- Submittals: Submit 4 copies of each required submittal; submit 4 copies where required for maintenance manuals. The Architect will retain one and will return one to the owner and two to the general contractor marked with action taken and corrections or modifications required.
  - a. Unless noncompliance with Contract Document provisions is observed, the submittal may serve as the final submittal.
- 5. Distribution: Furnish copies of final submittal to installers, subcontractors, suppliers, manufacturers, fabricators, and others required for performance of construction activities. Show distribution on transmittal forms.
  - a. Do not proceed with installation until a copy of Product Data is in the Installer's possession.
  - b. Do not permit use of unmarked copies of Product Data in connection with construction.

### 1.9 SAMPLES

Submit full-size, fully fabricated Samples cured and finished as specified and physically identical with the material or product proposed. Samples include partial sections of manufactured or fabricated components, cuts or containers of materials, color range sets, and swatches showing color, texture, and pattern.

1. Mount or display Samples in the manner to facilitate review of qualities indicated. Prepare Samples to match the Architect's sample. Include the following:

Specification Section number and reference.

- b. Generic description of the Sample.
- c. Sample source.
- d. Product name or name of the manufacturer.
- e. Compliance with recognized standards.
- f. Availability and delivery time.
- 2. Submit Samples for review of size, kind, color, pattern, and texture. Submit Samples for a final check of these characteristics with other elements and a comparison of these characteristics between the final submittal and the actual component as delivered and installed.
  - a. Where variation in color, pattern, texture, or other characteristic is inherent in the material or product represented, submit at least 3 multiple units that show approximate limits of the variations.
  - Refer to other Specification Sections for requirements for Samples that illustrate workmanship, fabrication techniques, details of assembly, connections, operation, and similar construction characteristics.
  - Refer to other Sections for Samples to be returned to the Contractor for incorporation in the Work. Such Samples must be undamaged at time of

- use. On the transmittal, indicate special requests regarding disposition of Sample submittals.
- d. Samples not incorporated into the Work, or otherwise designated as the Owner's property, are the property of the Contractor and shall be removed from the site prior to Substantial Completion.

Preliminary Submittals: Submit a full set of choices where Samples are submitted for selection of color, pattern, texture, or similar characteristics from a range of standard choices.

a. The Architect will review and return preliminary submittals with the Architect's notation, indicating selection and other action.

Submittals: Except for Samples illustrating assembly details, workmanship, fabrication techniques, connections, operation, and similar characteristics, submit 3 sets. The Architect will return one set marked with the action taken.

- 5. Maintain sets of Samples, as returned, at the Project Site, for quality comparisons throughout the course of construction.
  - a. Unless noncompliance with Contract Document provisions is observed, the submittal may serve as the final submittal.
  - Sample sets may be used to obtain final acceptance of the construction associated with each set.

Distribution of Samples: Prepare and distribute additional sets to subcontractors, manufacturers, fabricators, suppliers, installers, and others as required for performance of the Work. Show distribution on transmittal forms.

Field samples are full-size examples erected on-site to illustrate finishes, coatings, or finish materials and to establish the Project standard.

a. Comply with submittal requirements to the fullest extent possible. Process transmittal forms to provide a record of activity.

# 1.10 QUALITY ASSURANCE SUBMITTALS

Submit quality-control submittals, including design data, certifications, manufacturer's instructions, manufacturer's field reports, and other quality-control submittals as required under other Sections of the Specifications.

Certifications: Where other Sections of the Specifications require certification that a product, material, or installation complies with specified requirements, submit a notarized certification from the manufacturer certifying compliance with specified requirements.

1. Signature: Certification shall be signed by an officer of the manufacturer or other individual authorized to sign documents on behalf of the company.

Inspection and Test Reports: Requirements for submittal of inspection and test reports from independent testing agencies are specified in Division 1 Section "Quality Control."

# 1.11 ARCHITECT'S ACTION

Except for submittals for the record or information, where action and return is required, the

Architect will review each submittal, mark to indicate action taken, and return promptly.

1. Compliance with specified characteristics is the Contractor's responsibility.

Action Stamp: The Architect will stamp each submittal with a uniform, action stamp. The Architect will mark the stamp appropriately to indicate the action taken, as follows:

C. Unsolicited Submittals: The Architect will return unsolicited submittals to the sender without action.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION 01300

# SECTION 01400 - QUALITY CONTROL

#### PART I - GENERAL

#### I.I RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division I Specification Sections, apply to this Section.

#### I.2 SUMMARY

- A. This Section includes administrative and procedural requirements for quality-control services.
- B. Quality-control services include inspections, tests, and related actions, including reports performed by Contractor, by independent agencies, and by governing authorities. They do not include contract enforcement activities performed by Architect.
- C. Inspection and testing services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with Contract Document requirements.
- D. Requirements of this Section relate to customized fabrication and installation procedures, not production of standard products.
  - Specific quality-control requirements for individual construction activities are specified in the Sections that specify those activities. Requirements in those Sections may also cover production of standard products.
  - 2. Specified inspections, tests, and related actions do not limit Contractor's quality-control procedures that facilitate compliance with Contract Document requirements.
  - 3. Requirements for Contractor to provide quality-control services required by Architect, Owner, or authorities having jurisdiction are not limited by provisions of this Section.
- E. Related Sections: The following Sections contain requirements that relate to this Section:
  - I. Division I Section "Cutting and Patching" specifies requirements for repair and restoration of construction disturbed by inspection and testing activities.
  - 2. Division I Section "Submittals" specifies requirements for development of a schedule of required tests and inspections.

# 1.3 RESPONSIBILITIES

- A. Contractor Responsibilities: Unless otherwise indicated as the responsibility of another identified entity, Contractor shall provide inspections, tests, and other quality-control services specified elsewhere in the Contract Documents and required by authorities having jurisdiction. Costs for these services are included in the Contract Sum.
  - I. Where individual Sections specifically indicate that certain inspections, tests, and other quality-control services are the Contractor's responsibility, the Contractor shall employ and pay a quali-

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fied independent testing agency to perform quality-control services. Costs for these services are included in the Contract Sum.

- B. Retesting: The Contractor is responsible for retesting where results of inspections, tests, or other quality-control services prove unsatisfactory and indicate noncompliance with Contract Document requirements, regardless of whether the original test was Contractor's responsibility.
  - I. The cost of retesting construction, revised or replaced by the Contractor, is the Contractor's responsibility where required tests performed on original construction indicated noncompliance with Contract Document requirements.

#### I.4 SUBMITTALS

- A. Unless the Contractor is responsible for this service, the independent testing agency shall submit a certified written report, in duplicate, of each inspection, test, or similar service to the Architect. If the Contractor is responsible for the service, submit a certified written report, in duplicate, of each inspection, test, or similar service through the Contractor.
  - Submit additional copies of each written report directly to the governing authority, when the authority so directs.
  - 2. Report Data: Written reports of each inspection, test, or similar service include, but are not limited to, the following:
    - a. Date of issue.
    - b. Project title and number.
    - c. Name, address, and telephone number of testing agency.
    - d. Dates and locations of samples and tests or inspections.
    - e. Names of individuals making the inspection or test.
    - f. Designation of the Work and test method.
    - g. Identification of product and Specification Section.
    - h. Complete inspection or test data.
    - i. Test results and an interpretation of test results.
    - j. Ambient conditions at the time of sample taking and testing.
    - k. Comments or professional opinion on whether inspected or tested Work complies with Contract Document requirements.
    - I. Name and signature of laboratory inspector.
    - m. Recommendations on retesting.

# PART 2 - PRODUCTS (Not Applicable)

### PART 3 - EXECUTION

# 3.1 REPAIR AND PROTECTION

- A. General: Upon completion of inspection, testing, sample taking and similar services, repair damaged construction and restore substrates and finishes. Comply with Contract Document requirements for Division I Section "Cutting and Patching."
- B. Protect construction exposed by or for quality-control service activities, and protect repaired construction.

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C. Repair and protection is Contractor's responsibility, regardless of the assignment of responsibility for inspection, testing, or similar services.

**END OF SECTION 01400** 

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#### SECTION 01500 - CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

#### **GENERAL**

### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

# 1.2 SUMMARY

- A. This Section includes requirements for construction facilities and temporary controls, including temporary utilities, support facilities, and security and protection.
- B. Temporary utilities include, but are not limited to, the following:

Water service and distribution.

- 2. Temporary electric power and light.
- 3. Temporary heat.
- 4. Ventilation.
- 5. Sanitary facilities, including drinking water.
- 6. Storm and sanitary sewer.
- C. Support facilities include, but are not limited to, the following:

Storage sheds.

- 2. Dewatering facilities and drains.
- 3. Temporary project identification signs and bulletin boards.
- 4. Waste disposal services.
- D. Security and protection facilities include, but are not limited to, the following:

Temporary fire protection.

- 2. Barricades, warning signs, and lights.
- 3. Enclosure fencing.

#### 1.3 SUBMITTALS

Temporary Utilities: Submit reports of tests, inspections, meter readings, and similar procedures performed on temporary utilities.

### **QUALITY ASSURANCE**

A. Regulations: Comply with industry standards and applicable laws and regulations of authorities having jurisdiction including, but not limited to, the following:

Building code requirements.

- 2. Health and safety regulations.
- 3. Utility company regulations.

- 4. Police, fire department, and rescue squad rules.
- 5. Environmental protection regulations.
- Standards: Comply with NFPA 241 "Standard for Safeguarding Construction, Alterations, and Demolition Operations," ANSI A10 Series standards for "Safety Requirements for Construction and Demolition," and NECA Electrical Design Library "Temporary Electrical Facilities."
  - Electrical Service: Comply with NEMA, NECA, and UL standards and regulations for temporary electric service. Install service in compliance with NFPA 70 "National Electric Code."
- C. Inspections: Arrange for authorities having jurisdiction to inspect and test each temporary utility before use. Obtain required certifications and permits.

#### 1.5 PROJECT CONDITIONS

- Temporary Utilities: Prepare a schedule indicating dates for implementation and termination of each temporary utility. At the earliest feasible time, when acceptable to the Owner, change over from use of temporary service to use of permanent service.
- B. Conditions of Use: Keep temporary services and facilities clean and neat in appearance. Operate in a safe and efficient manner. Relocate temporary services and facilities as the Work progresses. Do not overload facilities or permit them to interfere with progress. Take necessary fire-prevention measures. Do not allow hazardous, dangerous, or unsanitary conditions, or public nuisances to develop or persist on-site.

#### PART 2 - PRODUCTS

# 2.1 MATERIALS

- A. Tarpaulins: Provide waterproof, fire-resistant, UL-labeled tarpaulins with flame-spread rating of 15 or less. For temporary enclosures, provide translucent, nylon-reinforced, laminated polyethylene or polyvinyl chloride, fire-retardant tarpaulins.
- B. Water: Provide potable water approved by local health authorities.

# 2.2 EQUIPMENT

- A. General: Provide new equipment. If acceptable to the Architect, the Contractor may use undamaged, previously used equipment in serviceable condition. Provide equipment suitable for use intended.
- Water Hoses: Provide 3/4-inch, heavy-duty, abrasion-resistant, flexible rubber hoses 100 feet long, with pressure rating greater than the maximum pressure of the water distribution system. Provide adjustable shutoff nozzles at hose discharge.
- C. Electrical Outlets: Provide properly configured, NEMA-polarized outlets to prevent insertion of 110- to 120-Volt plugs into higher voltage outlets. Provide receptacle outlets equipped with ground-fault circuit interrupters, reset button, and pilot light for connection of power tools and equipment.

- D. Electrical Power Cords: Provide grounded extension cords. Use hard-service cords where exposed to abrasion and traffic. Provide waterproof connectors to connect separate lengths of electric cords if single lengths will not reach areas where construction activities are in progress. Do not exceed safe length-voltage ratio.
- Lamps and Light Fixtures: Provide general service incandescent lamps of wattage required for adequate illumination. Provide guard cages or tempered-glass enclosures where exposed to breakage. Provide exterior fixtures where exposed to moisture.
- F. Heating Units: Provide temporary heating units that have been tested and labeled by UL, FM, or another recognized trade association related to the type of fuel being consumed.
- Temporary Toilet Units: Provide self-contained, single-occupant toilet units of the chemical, aerated recirculation, or combustion type. Provide units properly vented and fully enclosed with a glass-fiber-reinforced polyester shell or similar nonabsorbent material.
- H. Fire Extinguishers: Provide hand-carried, portable, UL-rated, Class A fire extinguishers for temporary offices and similar spaces. In other locations, provide hand-carried, portable, UL-rated, Class ABC, dry-chemical extinguishers or a combination of extinguishers of NFPA-recommended classes for the exposures.
  - 1. Comply with NFPA 10 and NFPA 241 for classification, extinguishing agent, and size required by location and class of fire exposure.

#### PART 3 - EXECUTION

#### 3.1 INSTALLATION

A. Use qualified personnel for installation of temporary facilities. Locate facilities where they will serve the Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required.

# 3.2 TEMPORARY UTILITY INSTALLATION

- A. General: Engage the appropriate local utility company to install temporary service or connect to existing service. Where company provides only part of the service, provide the remainder with matching, compatible materials and equipment. Comply with company recommendations.
  - 1. Arrange with company and existing users for a time when service can be interrupted, if necessary, to make connections for temporary services.
  - 2. Provide adequate capacity at each stage of construction. Prior to temporary utility availability, provide trucked-in services.
  - 3. Obtain easements to bring temporary utilities to the site where the Owner's easements cannot be used for that purpose.
  - Use Charges: Cost or use charges for temporary facilities are not chargeable to the Owner or Architect. Neither the Owner nor Architect will accept cost or use charges as a basis of claims for Change Orders.

Temporary Electric Power Service: Provide weatherproof, grounded electric power service and distribution system of sufficient size, capacity, and power characteristics during

construction period. Include meters, transformers, overload-protected disconnects, automatic ground-fault interrupters, and main distribution switch gear.

- Install electric power service underground, except where overhead service must be used.
- Power Distribution System: Install wiring overhead and rise vertically where least exposed to damage. Where permitted, wiring circuits not exceeding 125 Volts, ac 20 Ampere rating, and lighting circuits may be nonmetallic sheathed cable where overhead and exposed for surveillance.
- Temporary Lighting: When overhead floor or roof deck has been installed, provide temporary lighting with local switching.
  - Install and operate temporary lighting that will fulfill security and protection requirements without operating the entire system. Provide temporary lighting that will provide adequate illumination for construction operations and traffic conditions.
- Temporary Heat: Provide temporary heat required by construction activities for curing or drying of completed installations or for protection of installed construction from adverse effects of low temperatures or high humidity. Select safe equipment that will not have a harmful effect on completed installations or elements being installed. Coordinate ventilation requirements to produce the ambient condition required and minimize consumption of energy.
- Sanitary facilities include temporary toilets, wash facilities, and drinking-water fixtures. Comply with regulations and health codes for the type, number, location, operation, and maintenance of fixtures and facilities. Install where facilities will best serve the Project's needs.
  - 1. Provide toilet tissue, paper towels, paper cups, and similar disposable materials for each facility. Provide covered waste containers for used material.
- Toilets: Install self-contained toilet units. Shield toilets to ensure privacy. Use of pit-type privies will not be permitted.
- Wash Facilities: Install wash facilities supplied with potable water at convenient locations for personnel involved in handling materials that require wash-up for a healthy and sanitary condition. Dispose of drainage properly. Supply cleaning compounds appropriate for each condition.
- Drinking-Water Facilities: Provide containerized, tap-dispenser, bottled-water drinking-water units, including paper supply.

#### SUPPORT FACILITIES INSTALLATION

- A. If contractor chooses to use storage sheds, locate storage sheds, and other temporary construction and support facilities for easy access and within fenced area shown on construction documents.
  - 1. Maintain support facilities until near Substantial Completion. Remove prior to Substantial Completion. Personnel remaining after Substantial Completion will be permitted to use permanent facilities, under conditions acceptable to the Owner.

- Storage and Fabrication Sheds: (If Required) Install storage and fabrication sheds sized, furnished, and equipped to accommodate materials and equipment involved, including temporary utility service. Sheds may be open shelters or fully enclosed spaces within the building or elsewhere on-site.
- Temporary Enclosures: Provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities.
- Temporary Lifts and Hoists: Provide facilities for hoisting materials and employees. Truck cranes and similar devices used for hoisting materials are considered "tools and equipment" and not temporary facilities.
- Project Identification and Temporary Signs: Prepare project identification and other signs of size indicated. Install signs where indicated to inform the public and persons seeking entrance to the Project. Support on posts or framing of preservative-treated wood or steel. Do not permit installation of unauthorized signs.
  - Temporary Signs: Prepare signs to provide directional information to construction personnel and visitors.
- Collection and Disposal of Waste: Collect waste from construction areas and elsewhere daily. Comply with requirements of NFPA 241 for removal of combustible waste material and debris. Enforce requirements strictly. Do not hold materials more than 7 days during normal weather or 3 days when the temperature is expected to rise above 80 deg F (27 deg C). Handle hazardous, dangerous, or unsanitary waste materials separately from other waste by containerizing properly. Dispose of material lawfully.

# SECURITY AND PROTECTION FACILITIES INSTALLATION

- Except for use of permanent fire protection as soon as available, do not change over from use of temporary security and protection facilities to permanent facilities until Substantial Completion, or longer, as requested by the Architect.
- Temporary Fire Protection: Until fire-protection needs are supplied by permanent facilities, install and maintain temporary fire-protection facilities of the types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 10 "Standard for Portable Fire Extinguishers" and NFPA 241 "Standard for Safeguarding Construction, Alterations, and Demolition Operations."
  - 1. Locate fire extinguishers where convenient and effective for their intended purpose.
  - 2. Store combustible materials in containers in fire-safe locations.
  - 3. Maintain unobstructed access to fire extinguishers, fire hydrants, temporary fire-protection facilities, stairways, and other access routes for fighting fires. Prohibit smoking in hazardous fire-exposure areas.
  - 4. Provide supervision of welding operations, combustion-type temporary heating units, and similar sources of fire ignition.
- Barricades, Warning Signs, and Lights: Comply with standards and code requirements for erection of structurally adequate barricades. Paint with appropriate colors, graphics, and warning signs to inform personnel and the public of the hazard being protected against. Where appropriate and needed, provide lighting, including flashing red or

amber lights.

- Enclosure Fence: Install an enclosure fence with lockable entrance gates. Locate where indicated, determined sufficient to accommodate construction operations. Install in a manner that will prevent people, dogs, and other animals from easily entering the site, except by the entrance gates.
  - 1. Provide open-mesh, chainlink fencing with posts set in a compacted mixture of gravel and earth.
- Security Enclosure and Lockup: Install substantial temporary enclosure of partially completed areas of construction. Provide locking entrances to prevent unauthorized entrance, vandalism, theft, and similar violations of security.
  - Storage: Where materials and equipment must be stored, and are of value or attractive for theft, provide a secure lockup. Enforce discipline in connection with the installation and release of material to minimize the opportunity for theft and vandalism.

### OPERATION, TERMINATION, AND REMOVAL

- Supervision: Enforce strict discipline in use of temporary facilities. Limit availability of temporary facilities to essential and intended uses to minimize waste and abuse.
- B. Maintenance: Maintain facilities in good operating condition until removal. Protect from damage by freezing temperatures and similar elements.
  - 1. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation, and similar facilities on a 24-hour basis where required to achieve indicated results and to avoid possibility of damage.
- C. Termination and Removal: Unless the Architect requests that it be maintained longer, remove each temporary facility when the need has ended, when replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with the temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.
  - Materials and facilities that constitute temporary facilities are the Contractor's property. The Owner reserves the right to take possession of project identification signs.
  - Remove materials contaminated with road oil, asphalt and other petrochemical compounds, and other substances that might impair growth of plant materials or lawns. Repair or replace street paving, curbs, landscaping and sidewalks at the temporary entrances, as required by the governing authority.
  - 3. At Substantial Completion, clean and renovate permanent facilities used during the construction period including, but not limited to, the following:
    - Replace significantly worn parts and parts subject to unusual operating conditions.

#### SECTION 01700 - CONTRACT CLOSEOUT

#### **GENERAL**

# 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

### 1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for contract closeout including, but not limited to, the following:
  - 1. Inspection procedures.
  - 2. Project record document submittal.
  - 3. Operation and maintenance manual submittal.
  - 4. Submittal of warranties.
  - 5. Final cleaning.
- B. Closeout requirements for specific construction activities are included in the appropriate Sections in Divisions 2 through 16.

### 1.3 FINAL ACCEPTANCE

- A. Preliminary Procedures: Before requesting final inspection for certification of final acceptance and final payment, complete the following. List exceptions in the request.
  - Submit the final payment request with releases and supporting documentation not previously submitted and accepted. Include insurance certificates for products and completed operations where required.
  - Submit an updated final statement, accounting for final additional changes to the Contract Sum.
  - 3. Submit a certified copy of the Architect's final inspection list of items to be completed or corrected, endorsed and dated by the Architect. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance and shall be endorsed and dated by the Architect.
  - 4. Submit final meter readings for utilities, a measured record of stored fuel, and similar data as of the date of Substantial Completion or when the Owner took possession of and assumed responsibility for corresponding elements of the Work.
  - 5. Submit consent of surety to final payment.
  - 6. Submit a final liquidated damages settlement statement.
  - 7. Submit evidence of final, continuing insurance coverage complying with insurance requirements.

Reinspection Procedure: The Architect will reinspect the Work upon receipt of notice that the Work, including inspection list items from earlier inspections, has been completed, except for items whose completion is delayed under circumstances acceptable to the Architect.

- Upon completion of reinspection, the Architect will prepare a certificate of final acceptance. If the Work is incomplete, the Architect will advise the Contractor of Work that is incomplete or of obligations that have not been fulfilled but are required for final acceptance.
- 2. If necessary, reinspection will be repeated.

### RECORD DOCUMENT SUBMITTALS

General: Do not use record documents for construction purposes. Protect record documents from deterioration and loss in a secure, fire-resistant location. Provide access to record documents for the Architect's reference during normal working hours.

Record Drawings: Maintain a clean, undamaged set of blue or black line white-prints of Contract Drawings and Shop Drawings. Mark the set to show the actual installation where the installation varies substantially from the Work as originally shown. Mark which drawing is most capable of showing conditions fully and accurately. Where Shop Drawings are used, record a cross-reference at the corresponding location on the Contract Drawings. Give particular attention to concealed elements that would be difficult to measure and record at a later date.

- 1. Mark record sets with red erasable pencil. Use other colors to distinguish between variations in separate categories of the Work.
- 2. Mark new information that is important to the Owner but was not shown on Contract Drawings or Shop Drawings.
- 3. Note related change-order numbers where applicable.
- 4. Organize record drawing sheets into manageable sets. Bind sets with durable-paper cover sheets; print suitable titles, dates, and other identification on the cover of each set.

Record Specifications: Maintain one complete copy of the Project Manual, including addenda. Include with the Project Manual one copy of other written construction documents, such as Change Orders and modifications issued in printed form during construction.

- 1. Mark these documents to show substantial variations in actual Work performed in comparison with the text of the Specifications and modifications.
- 2. Give particular attention to substitutions and selection of options and information on concealed construction that cannot otherwise be readily discerned later by direct observation.
- 3. Note related record drawing information and Product Data.
- Upon completion of the Work, submit record Specifications to the Architect for the Owner's records.

Record Product Data: Maintain one copy of each Product Data submittal. Note related Change Orders and markup of record drawings and Specifications.

- 1. Mark these documents to show significant variations in actual Work performed in comparison with information submitted. Include variations in products delivered to the site and from the manufacturer's installation instructions and recommendations.
- 2. Give particular attention to concealed products and portions of the Work that cannot otherwise be readily discerned later by direct observation.
- 3. Upon completion of markup, submit complete set of record Product Data to the Architect for the Owner's records.

Record Sample Submitted: Immediately prior to Substantial Completion, the Contractor shall meet with the Architect and the Owner's personnel at the Project Site to determine which Samples are to be transmitted to the Owner for record purposes. Comply with the Owner's instructions regarding delivery to the Owner's Sample storage area.

Miscellaneous Record Submittals: Refer to other Specification Sections for requirements of miscellaneous record keeping and submittals in connection with actual performance of the Work. Immediately prior to the date or dates of Substantial Completion, complete miscellaneous records and place in good order. Identify miscellaneous records properly and bind or file, ready for continued use and reference. Submit to the Architect for the Owner's records.

Maintenance Manuals: Organize operation and maintenance data into suitable sets of manageable size. Bind properly indexed data in individual, heavy-duty, 2-inch (51-mm), 3-ring, vinyl-covered binders, with pocket folders for folded sheet information. Mark appropriate identification on front and spine of each binder. Include the following types of information:

- 1. Emergency instructions.
- 2. Spare parts list.
- 3. Copies of warranties.
- 4. Recommended "turn-around" cycles.
- Inspection procedures.
- 6. Shop Drawings and Product Data.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

# 3.1 CLOSEOUT PROCEDURES

Operation and Maintenance Instructions: Arrange for each Installer of equipment that requires regular maintenance to meet with the Owner's personnel to provide instruction in proper operation and maintenance. Provide instruction by manufacturer's representatives if installers are not experienced in operation and maintenance procedures. Include a detailed review of the following items:

Maintenance manuals.

- 2. Record documents.
- 3. Spare parts and materials.
- 4. Tools.
- 5. Identification systems.
- 6. Hazards.
- 7. Cleaning.
- 8. Warranties and bonds.
- 9. Maintenance agreements and similar continuing commitments.

# 3.2 FINAL CLEANING

General: The General Conditions require general cleaning during construction. Regular site cleaning is included in Division 1 Section "Construction Facilities and Temporary

### Controls."

B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to the condition expected in a normal, commercial building cleaning and maintenance program. Comply with manufacturer's instructions.

Complete the following cleaning operations before requesting inspection for certification of Substantial Completion.

Remove labels that are not permanent labels.

- b. Clean exposed exterior and interior hard-surfaced finishes to a dust-free condition, free of stains, films, and similar foreign substances. Restore reflective surfaces to their original condition.
- c. Wipe surfaces of mechanical and electrical equipment.
- d. Clean the site, including landscape development areas, of rubbish, litter, and other foreign substances. Sweep paved areas broom clean; remove stains, spills, and other foreign deposits. Rake grounds that are neither paved nor planted to a smooth, even-textured surface.

Removal of Protection: Remove temporary protection and facilities installed for protection of the Work during construction.

- D. Compliance: Comply with regulations of authorities having jurisdiction and safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on the Owner's property. Do not discharge volatile, harmful, or dangerous materials into drainage systems. Remove waste materials from the site and dispose of lawfully.
  - Where extra materials of value remain after completion of associated Work, they become the Owner's property. Dispose of these materials as directed by the Owner.

**END OF SECTION 01700** 

### SECTION 02070 - SELECTIVE DEMOLITION

#### PART I - GENERAL

#### I.I RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division I Specification Sections, apply to this Section.

#### I.2 SUMMARY

- A. This Section includes the following:
  - I. Demolition and removal of selected items.
  - 2. Patching and repairs.
- B. Related Sections: The following Sections contain requirements that relate to this Section:
  - I. Division I Section "Summary of Work" for use of the building and phasing requirements.
  - 2. Division I Section "Schedules and Reports" for selective demolition schedule requirements.
  - 3. Division I Section "Construction Facilities and Temporary Controls" for temporary utilities, temporary construction and support facilities, temporary security and protection facilities, and environmental protection measures for selective demolition operations.
  - 4. Division I Section "Contract Closeout" for record document requirements.

# 1.3 DEFINITIONS

- A. Remove: Remove and legally dispose of items except those indicated to be reinstalled, salvaged, or to remain the Owner's property.
- B. Remove and Reinstall: Remove items indicated; clean, service, and otherwise prepare them for reuse; store and protect against damage. Reinstall items in the same locations.
- C. Existing to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by the Architect, items may be removed to a suitable, protected storage location during selective demolition and then cleaned and reinstalled in their original locations.

### I.4 MATERIALS OWNERSHIP

A. Except for items or materials indicated to be reused, salvaged, reinstalled, or otherwise indicated to remain the Owner's property, demolished materials shall become the Contractor's property and shall be removed from the site with further disposition at the Contractor's option.

### 1.5 SUBMITTALS

# Division of Facilities Construction Management

- A. General: Submit each item in this Article according to the Conditions of the Contract and Division I Specification Sections, for information only, unless otherwise indicated.
- B. Proposed dust-control measures.
- C. Proposed noise-control measures.
- D. Schedule of selective demolition activities indicating the following:
  - I. Detailed sequence of selective demolition and removal work, with starting and ending dates for each activity.
  - 2. Interruption of utility services.
  - 3. Coordination for shutoff, capping, and continuation of utility services.
  - 4. Detailed sequence of selective demolition and removal work to ensure uninterrupted progress of Owner's on-site operations.
  - 5. Coordination of Owner's continuing occupancy of existing building and of Owner's partial occupancy of completed Work.
- E. Landfill records indicating receipt and acceptance of wastes by a landfill facility licensed to accept wastes.

### I.6 QUALITY ASSURANCE

- A. Demolition Firm Qualifications: Engage an experienced firm that has successfully completed selective demolition Work similar to that indicated for this Project.
- B. Regulatory Requirements: Comply with governing EPA notification regulations before starting selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.

# 1.7 PROJECT CONDITIONS

- A. Conduct demolition so that Owner's operations will not be disrupted. Provide not less than 72 hours' notice to Owner of activities that will affect Owner's operations.
- B. Owner assumes no responsibility for actual condition of buildings to be selectively demolished.
  - Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.
- C. Asbestos: Asbestos should not be encountered in the Work. If any materials suspected of containing asbestos are encountered, do not disturb the materials. Immediately notify the Architect and the Owner.
- D. Storage or sale of removed items or materials on-site will not be permitted.

#### 1.8 SCHEDULING

A. Arrange selective demolition schedule so as not to interfere with Owner's on-site operations.

#### I.9 WARRANTY

A. Existing Special Warranty: Remove, replace, patch, and repair materials and surfaces cut or damaged during selective demolition, by methods and with materials so as not to void existing warranties.

### PART 2 - PRODUCTS (Not Applicable)

#### 2.1 REPAIR MATERIALS

- A. Use repair materials identical to existing materials.
  - I. Where identical materials are unavailable or cannot be used for exposed surfaces, use materials that visually match existing adjacent surfaces to the fullest extent possible.
  - 2. Use materials whose installed performance equals or surpasses that of existing materials.

### PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Verify that utilities have been disconnected and capped.
- B. Survey existing conditions and correlate with requirements indicated to determine extent of selective demolition required.
- C. Inventory and record the condition of items to be removed and reinstalled
- D. When unanticipated mechanical, electrical, or structural elements that conflict with the intended function or design are encountered, investigate and measure the nature and extent of the conflict. Promptly submit a written report to the Architect.
- E. Survey the condition of the building to determine whether removing any element might result in structural deficiency or unplanned collapse of any portion of the structure or adjacent structures during selective demolition.
- F. Perform surveys as the Work progresses to detect hazards resulting from selective demolition activities.

### 3.2 UTILITY SERVICES

- A. Maintain existing utilities to remain in service and protect them against damage during selective demolition operations.
  - a. Provide not less than 72 hours' notice to Owner if shutdown of service is required during changeover.

#### 3.3 PREPARATION

A. Conduct demolition operations and remove debris to ensure minimum interference with roads, streets, walks, and other adjacent occupied and used facilities.

- I. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction. Provide alternate routes around closed or obstructed traffic ways if required by governing regulations.
- B. Conduct demolition operations to prevent injury to people and damage to adjacent buildings and facilities to remain. Ensure safe passage of people around selective demolition area.
  - I. Erect temporary protection, such as walks, fences, railings, canopies, and covered passageways, where required by authorities having jurisdiction.
  - 2. Protect existing site improvements, appurtenances, and landscaping to remain.
  - 3. Protect walls, ceilings, floors, and other existing finish work that are to remain and are exposed during selective demolition operations.

#### 3.4 POLLUTION CONTROLS

- A. Use water mist, temporary enclosures, and other suitable methods to limit the spread of dust and dirt. Comply with governing environmental protection regulations.
  - I. Do not use water when it may damage existing construction or create hazardous or objectionable conditions, such as ice, flooding, and pollution.
- B. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
  - I. Remove debris from elevated portions of building by chute, hoist, or other device that will convey debris to grade level.
- C. Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before start of selective demolition.

### 3.5 SELECTIVE DEMOLITION

- A. Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete Work within limitations of governing regulations and as follows:
  - Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting
    methods least likely to damage construction to remain or adjoining construction. To minimize
    disturbance of adjacent surfaces, use hand or small power tools designed for sawing or grinding,
    not hammering and chopping. Temporarily cover openings to remain.
  - Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
  - 3. Do not use cutting torches
  - 4. Remove decayed, vermin-infested, or otherwise dangerous or unsuitable materials and promptly dispose of off-site.
  - 5. Locate selective demolition equipment throughout the structure and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
  - 6. Dispose of demolished items and materials promptly. On-site storage or sale of removed items is prohibited.
  - 7. Return elements of construction and surfaces to remain to condition existing before start of selective demolition operations.

#### 3.6 PATCHING AND REPAIRS

- A. Promptly patch and repair holes and damaged surfaces caused to adjacent construction by selective demolition operations.
- B. Where repairs to existing surfaces are required, patch to produce surfaces suitable for new materials.
  - I. Completely fill holes and depressions in existing masonry walls to remain with an approved masonry patching material, applied according to manufacturer's printed recommendations.
- C. Restore exposed finishes of patched areas and extend finish restoration into adjoining construction to remain in a manner that eliminates evidence of patching and refinishing.

#### 3.7 DISPOSAL OF DEMOLISHED MATERIALS

- A. General: Promptly dispose of demolished materials. Do not allow demolished materials to accumulate on-site.
- B. Burning: Do not burn demolished materials.
- C. Disposal: Transport demolished materials off Owner's property and legally dispose of them.

**END OF SECTION 02070** 

#### 1.1 GENERAL

- A. Definitions in this Section include the following:
  - 1. Backfill: Soil materials used to fill an excavation.
  - 2. Drainage Course: Layer supporting slab-on-grade used to minimize capillary flow of pore water.
  - 3. Excavation: Removal of material encountered above subgrade elevations.
    - a. Additional Excavation: Excavation below subgrade elevations as directed by Architect. Additional excavation and replacement material will be paid for according to Contract provisions for changes in the Work.
    - b. Unauthorized Excavation: Excavation below subgrade elevations or beyond indicated dimensions without direction by Architect. Unauthorized excavation, as well as remedial work directed by Architect, shall be without additional compensation.
  - 4. Fill: Soil materials used to raise existing grades.
  - 5. Structures: Buildings, footings, foundations, retaining walls, slabs, tanks, curbs, mechanical and electrical appurtenances, or other man-made stationary features constructed above or below the ground surface.
  - 6. Subgrade: Surface or elevation remaining after completing excavation, or top surface of a fill or backfill immediately below subbase, drainage fill, or topsoil materials.
  - 7. Utilities include on-site underground pipes, conduits, ducts, and cables, as well as underground services within buildings.

Existing Utilities: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted in writing by Architect and then only after arranging to provide temporary utility services according to requirements indicated.

### 1.2 PRODUCTS

- A. Soil Materials: Provide borrow soil materials when sufficient satisfactory soil materials are not available from excavations.
- Satisfactory Soils: ASTM D 2487 soil classification groups GW, GP, GM, SW, SP, and SM, or a combination of these group symbols; free of rock or gravel larger than 1 inches (75 mm) in any dimension, debris, waste, frozen materials, vegetation, and other deleterious matter.
- C. Unsatisfactory Soils: ASTM D 2487 soil classification groups GC, SC, ML, MH, CL, CH, OL, OH, and PT, or a combination of these group symbols.
- D. Backfill and Fill: Satisfactory soil materials.
- E. Subbase Material: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940; with at least 90 percent passing a 1-1/2-inch (38-mm) sieve and not more than 12 percent passing a No. 200 (0.075-mm) sieve.

- F. Drainage Fill: Washed, narrowly graded mixture of crushed stone, or crushed or uncrushed gravel; ASTM D 448; coarse-aggregate grading Size 57; with 100 percent passing a 1-1/2- inch (38-mm) sieve and 0 to 5 percent passing a No. 8 (2.36-mm) sieve.
- G. Detectable Warning Tape: Polyethylene film warning tape encasing a metallic core, minimum 6 inches (150 mm) wide and 4 mils (0.1 mm) thick, continuously inscribed with a description of the utility.

### 1.3 DRAINAGE COURSE

Under slabs-on-grade, install drainage fabric on prepared subgrade according to manufacturer's written instructions, overlapping sides and ends. Place drainage course on drainage fabric and as follows:

Under slabs-on-grade, place drainage course on prepared subgrade and as follows:

Compact drainage course to required cross sections and thickness to not less than 95 percent of maximum dry unit weight according to ASTM D 698.

2. When compacted thickness of drainage course is 6 inches (150 mm) or less, place materials in a single layer.

#### 1.4 EXECUTION

- A. Preparation: Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earthwork operations.
- B. Provide erosion- and sedimentation-control measures.
- C. Prevent surface water and ground water from entering excavations, from ponding on prepared subgrades, and from flooding Project site and surrounding area.
- D. Protect subgrades from softening, undermining, washout, and damage by rain or water accumulation.
- E. Excavate to subgrade elevations regardless of the character of surface and subsurface conditions encountered, including rock, soil materials, and obstructions.
  - 1. If excavated materials intended for fill and backfill include unsatisfactory soil materials and rock, replace with satisfactory soil materials.
- F. Excavate for walks to indicated elevations and dimensions. Extend excavations for placing and removing concrete formwork, for installing services and other construction, and for inspections. Trim bottoms to required lines and grades to leave solid base to receive other work.
- G. Excavate utility trenches to indicated gradients, lines, depths, and invert elevations of uniform widths to provide a working clearance on each side of pipe or conduit. Excavate trench walls vertically from trench bottom to 12 inches (300 mm) higher than top of pipe or conduit.

- Excavate trenches deeper than bottom of pipe elevation, 6 inches (150 mm) deeper in rock, 4 inches (100 mm) deeper elsewhere, to allow for bedding course. Hand excavate for bell of pipe.
- H. Proof roll subgrades, before filling or placing aggregate courses, with heavy pneumatictired equipment to identify soft pockets and areas of excess yielding. Do not proof roll wet or saturated subgrades.
- I. Reconstruct subgrades damaged by freezing temperatures, frost, rain, accumulated water, or construction activities.
- J. Fill unauthorized excavation under foundations or wall footings by extending bottom elevation of concrete foundation or footing to excavation bottom, without altering top elevation. Lean concrete fill may be used when approved by Architect.
  - 1. Fill unauthorized excavations under other construction or utility pipe as directed by Architect.
- K. Stockpile borrow materials and satisfactory soil materials, without intermixing, in shaped, graded, drained, and covered stockpiles. Stockpile soil materials away from edge of excavations and outside drip line of remaining trees.
- L. Utility Trench Backfill: Place, compact, and shape bedding course to provide continuous support for pipes and conduits over rock and other unyielding bearing surfaces and to fill unauthorized excavations.
  - Place and compact initial backfill of satisfactory soil material or subbase material, free of particles larger than 1 inch (25 mm), to a height of 12 inches (300 mm) over the utility pipe or conduit. Place and compact final backfill of satisfactory soil material to final subgrade.
  - 2. Install warning tape directly above utilities, 12 inches (300 mm) below finished grade, except 6 inches (150 mm) below subgrade under pavements and slabs.
- M. Fill: Place and compact fill material in layers to required elevations.
- N. Uniformly moisten or aerate subgrade and each subsequent fill or backfill layer before compaction to within 2 percent of optimum moisture content.
  - 1. Remove and replace, or scarify and air-dry, otherwise satisfactory soil material that exceeds optimum moisture content by 2 percent and is too wet to compact to specified dry unit weight.
- O. Compaction: Place backfill and fill materials in layers not more than 6 inches (200 mm) in loose depth for material compacted by heavy compaction equipment, and not more than 4 inches (100 mm) in loose depth for material compacted by hand-operated tampers.

Compact soil to not less than the following percentages of maximum dry unit weight according to ASTM D 1557:

- Under walkways, scarify and recompact top 6 inches (150 mm) below subgrade and compact each layer of backfill or fill material at 92 percent.
- 2. Under lawn or unpaved areas, scarify and recompact top 6 inches (150 mm) below subgrade and compact each layer of backfill or fill material at 85 percent.
- Q. Grading: Uniformly grade areas to a smooth surface, free from irregular surface

- changes. Comply with compaction requirements and grade to cross sections, lines, and elevations indicated. Grade lawns, walks, and unpaved subgrades to tolerances of plus or minus 1/2 inch (25 mm) and pavements and areas within building lines to plus or minus 1/2 inch (13 mm).
- R. Subbase and Base Courses: Under pavements and walks, place subbase course on prepared subgrade. Place base course material over subbase. Compact to required grades, lines, cross sections, and thickness to not less than 95 percent of maximum dry unit weight according to ASTM D 1557.
- Under slabs-on-grade, place drainage course on prepared subgrade. Compact to required cross sections and thickness to not less than 95 percent of maximum dry unit weight according to ASTM D 698.
- T. Testing Agency: Owner will engage a qualified independent engineering testing agency to perform field quality-control testing.
  - 1. Allow testing agency to inspect and test subgrades and each fill or backfill layer. Proceed with subsequent earthwork only after test results for previously completed work comply with requirements.
  - When testing agency reports that subgrades, fills, or backfills have not achieved degree of compaction specified, scarify and moisten or aerate, or remove and replace soil to depth required; recompact and retest until specified compaction is obtained.
- U. Repair and reestablish grades to specified tolerances where completed or partially completed surfaces become eroded, rutted, settled, or where they lose compaction.
- V. Where settling occurs before Project correction period elapses, remove finished surfacing, backfill with additional soil material, compact, and reconstruct surfacing.
- W. Disposal: Remove surplus satisfactory soil and waste material, including unsatisfactory soil, trash, and debris, and legally dispose of it off Owner's property.

END OF SECTION 02300